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**"Examiner Search Notes"**

Thank you.

James Martinell  
Primary Examiner 1631





|    |      |  |      |
|----|------|--|------|
| QY | 72   | GTATCCGACGACGACCATTCCTCCCGGAAAGCTACCGCTGCTGCATCTTACACGACG      | 131  |
| Db | 375  | AlaGlyAlaValAlaAlaGlyAlaAlaArgArgThrAlaAlaGly-----             | 389  |
| QY | 132  | GGAGCTGCCTCTTTCAGTGTTCACCTGGCTGAGCTGTGATGTCTGTAGACCATG         | 191  |
| Db | 390  | -----ArgArgProArgSerArgProAlaLeu                               | 398  |
| QY | 192  | CCCACTGTGGGCTTTGTGTGTCACCAACGACCACTGGACAGTG--AGCCATGG          | 248  |
| Db | 399  | ProGly---GlyPro-----ArgProAlaGlyGlnProAspAlaArgPro             | 412  |
| QY | 249  | GAGAGCCCTTC-----CAAGGAGATGGCAGGAC                              | 278  |
| Db | 413  | AspArgProAlaProArgAlaProValProAlaAlaGlyProAlaGlyArgGlyArgAla   | 432  |
| QY | 279  | CTC---TCGGAGGTGTGATAGATAGTATCCCATCGAAGTCAGAGGGGTGCTGAG         | 335  |
| Db | 433  | LeuValSerAlaGlyAlaGlyAlaGlyThrGlyGlnSerArgSerLeuGlyAlaLeuArg   | 452  |
| QY | 336  | TGATGAGAGAGGATATACGTGTCTTCAAGCACTCAATTAAGGAGATGCTTGCT          | 395  |
| Db | 453  | LeuProGlyThrGlyLeuAlaGlyGlyArgAlaGlyArgProGlyArgGlyValGlnPro   | 472  |
| QY | 396  | CCA-----GAAAGAAACATCCAGCCCTGTACTCTCACTGTGCCCCCA                | 443  |
| Db | 473  | ProAlaGlyGlyArgThrAlaAspAlaAlaAlaPro-----CysPro--              | 486  |
| QY | 444  | GATCGCAGCTGTGTTTTCACAGCTGATGAGACCAAGTGTGCTGATCCCAACAG          | 503  |
| Db | 487  | ---ArgSerAlaValSerArgArgAlaAlaAlaGlyGlnLeuArgProAspProAlaAla   | 505  |
| QY | 504  | ACCACATATGTGAAGGCTCTGGCTGACCTATCTGAGGGCTCGGCTGACCACTGACTAT     | 563  |
| Db | 506  | GlyThrAlaGlyAlaGlyAlaGlyArgProAlaAlaGly-----ProArgLeuLeu       | 522  |
| QY | 564  | CCTCAGCAGCTGGCTTGCCTGTGAGGAGGAGTTCGACTGGAGACCTGCATGCTAC        | 623  |
| Db | 523  | ProAlaGlyThrGlyAlaProValAlaAlaLeuArg---ThrGlyAlaGlySerAlaGly   | 541  |
| QY | 624  | CTGGGACCCCTGCGACAAAGCTAACTCCACAGACAGATGTGACCGACCAACG           | 683  |
| Db | 542  | ArgAla-ProIleGlyThrGlyArgThrLeuGln-----ArgArgGlySerArgAlaArg   | 559  |
| QY | 684  | TGCATTAATGCCAAATGTTAAATGTGAGTTTACAGGCTAGCTATGGAGACTGCTGCCT     | 743  |
| Db | 559  | Gser-----AlaAlaAlaArgAl  | 565  |
| QY | 744  | CTAGTCCAGGAATCATGGGGGATATACCTGCTTCCAACTGTGGGTGTATAGCAAGCT      | 803  |
| Db | 565  | AlaAlaArgHisSerArgGlyAlaGlyAlaAlaAspAlaAlaLeuArgSerAlaHisGlyTy | 585  |
| QY | 804  | CAGGCTAGTCTCCCACTGGGGGCTGTGACCCCTCCCTGGAGCGGTTCGTGGAGACCCC     | 863  |
| Db | 585  | ArgArgArgAl-----ProValProLeuArgThrIleAlaPro-GlyProAlaAla       | 601  |
| QY | 864  | ATCACTGTGTTCAATAGTGTGAGATGTAGCTTAAAGCCCTGTGCTCTGCTGCATG        | 923  |
| Db | 601  | AspProAlaGlnArgProGlyAlaGlyGlyAlaAlaArgProAlaThrAlaAlaAla--A   | 620  |
| QY | 924  | CCACGACGAGC-----GGTGGGGGCTGCTGGGGGACAA                         | 956  |
| Db | 620  | IaThrAlaGlySerProAlaAlaThrValArgArgProAlaGlyGlyArgArgGlyAla    | 640  |
| QY | 957  | TCCATGTGGGAATGTTCTCTCACTTAAGTCTGACAGAGACCTGGGGGGGATGCTCC       | 1016 |
| Db | 640  | IaGlnSerAlaGlnLeuSerGlyAlaGlyGlyAlaArgProAspArgProGlyLeuLeuG   | 660  |
| QY | 1017 | AGGATGTGGGTGATTTCTGACTCTGGGGAG-----GCTATCTCTGACCTCCCGACA--G    | 1067 |
| Db | 660  | Ln-----ProGlyAspArgArgAlaThrValHisSerProAlaHisG                | 674  |
| QY | 1068 | GGGACATCTCCAGGCCACGGGGGTGAGGGGCGAGGTGACACTTCAGCATGACCA         | 1127 |

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Db      674  LygiuAspProArgProIaAspGlnAlaArgIyGlyProSer----- 690
Oy      1128  AGACTGGGGTTCAGGGAGACAGTGTGTTTGAACGACGACTGGGGCGGGGTGGGCGCG 1187
Db      691  -----AspProIyGlyGlnAlaGlyGlnGlyProA 701
Oy      1188  GGCCTTTCGTGCTCATTGTTGCTTCATGAAAGAGCTCAACAGCAGCAAAACCGAGCTTTC 1247
Db      701  rGProIaA-----ProProGlnArgProGlnCysArgAlaArgP 714
Oy      1248  CCCTT 1252
Db      714  roVal 715

RESULT 2
US-09-252-991A-17588
; Sequence 17588, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; PRIOR FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 17588
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-17588

Alignment Scores:
Pred. No.: 0.000218 Length: 299
Score: 126.50 Matches: 94
Percent Similarity: 33.86% Conservative: 35
Best Local Similarity: 24.67% Mismatches: 132
Query Match: 4.94% Indels: 120
DB: 4 Gaps: 22

US-09-989-919-15 (1-1397) x US-09-252-991A-17588 (1-299)
Oy      1182  CCCACCCCGCCGAGGTCGTGCTCAACACACACTGTCTCCGACCCGACGTTGGCT 1123
Db      3  ProserSerLeuProCysProTPrArgProGlyThrCys----- 15
Oy      1122  CATGCTAGAGGTGTGCACCTCTGCCCCCTGACCCCTCGGGCTGGCTGGAGATGTCCCTGTC 1063
Db      16  -----CysTrpProArgProSerProThrProPro----- 25
Oy      1062  GGGAGGTCAAGATAGCTCCCGCAGGTACAGAAATACCCACATCC----- 1018
Db      26  -----AlaAlaPro-----AspCysProThrSerAlaTrpProArgArg 38
Oy      1017  ---TGAGACATC-----CCCGCAAGTCTCTGTGTCCAGACTTAAGTGA 976
Db      39  ProTrpSerAlaAlaThrSerProProProAlaThrThrArgPro----- 54
Oy      975  GAGAACTCCACGATGATGTGTCCGACGACGAGCCCGACCGCTGTGGAGATGCA 916
Db      55  -----TrpProArgTrpValThrProThr---ProArgSerAlaSerProThrCysArg 71
Oy      915  GCACGACGACGAGGGGCTTTAGCTACATTTCTACACTATTGAACACAGTATGGGGCTGC 856
Db      72  SerProAlaAlaThrAlaProSerArg----- 80
Oy      855  CCAGG-----AACGTCGCCAGGAGGGGACACAGCCCCCAG 820

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Db 81 ProArgProLysSerSerThrAlaArgProArgArgProArgArgLys----- 96  
QY 819 TGGGAGAGACTAGCTGAGTGTGCTTACAGCCCAAGGTTGAGAGAGCATACCC 760  
Db 97 -----ProAlaArgAlaLeuAla-----SerGlyThrArgProSerProAlaPro 111  
QY 759 ATGATTCCTGAGCTAGAGCCAGCAGATCCCATAGGCTGATTAACCTCATTTTAA 700  
Db 112 AlaThrProSerThrAlaArgProSerAlaCysSerAlaArgProSerAlaArg 131  
QY 699 ATTGGCATTTATGACAGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 640  
Db 132 ThrValProThrCys-----ArgSerSerSerSerThrCys-SerThrArg 146  
QY 639 CTGCAGAGGCTTCCAGAGTACATGATGCTGCTGCTGCTGCTGCTGCTGCTGCT 580  
Db 146 gSerProGlyArgLysSerThrArgSerSerAlaSerThrSerGlyAla-----Ar 163  
QY 579 AGCCAGCTGCTGAGTACATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 526  
Db 163 gAlaAerCysArgArg-----ProThrThrArgArgSerSerSerThrAlaProArgAlaPro 182  
QY 525 CAGAGGCTTACATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 466  
Db 182 o-----ThrProSer----- 185  
QY 465 TGAAG 406  
Db 186 -----ThrThrAlaArgSerSerArgSerSerAlaSerAlaGlySer 199  
QY 405 CTCTTTC-----TGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 364  
Db 199 yAlaItrpMetCysAlaGlyThrAsnTrp-ProArgSerThrArgCysArgAlaThrArg 218  
QY 363 TGAAGAGAGATATACCTCTCTCTCATCAGCAGCAGCAGCAGCAGCAGCAGCAG 304  
Db 219 --LysSerArgArgSerCysSerAsn-SerCysAlaProPro-----ThrArgProAlaGly 236  
QY 303 TCACATATCATCACTCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 250  
Db 237 CysProAlaSerGlySerThrArgTrpProGlyCysSerProThrAlaAsnSerAlaSer 256  
QY 249 CCCAGTGGCTCAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 199  
Db 257 ProThrArgArgProProArgArgCysTrpLysArgSerArgArgAlaThrProArgPro 276  
QY 198 CACTGGGATGCTCTTACAGACATCCAGCAGCAGCAGCAGCAGCAGCAGCAG 142  
Db 277 GlySerAlaTrpProSerCysSerThrThrLeProThrArgAlaThrTrpLysArg 295

RESULT 3  
US-08-026-138E-3  
Sequence 3, Application US/08026138E  
Patent No. 5502166  
GENERAL INFORMATION:  
APPLICANT: Masayoshi MISHINA  
TITLE OR INVENTION: NOVEL PROTEINS AND GENES CODING THE SAME  
NUMBER OF SEQUENCES: 19  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Nishiohata Residence 1-107  
STREET: 5214, Nishiohata-machi  
CITY: Niigata-shi  
STATE: Niigata-ken  
COUNTRY: JAPAN  
ZIP: 951  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 inch, 1.44 MB storage  
COMPUTER: IBM compatible  
OPERATING SYSTEM: MS-DOS v.5  
SOFTWARE: Word Perfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/026,138E  
FILING DATE: 26-FEB-1993

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 39563/1992  
FILING DATE: 26-FEB-1992  
APPLICATION NUMBER: JP 173155/1992  
FILING DATE: 30-JUN-1992  
APPLICATION NUMBER: JP 215017/1992  
FILING DATE: 12-AUG-1992  
APPLICATION NUMBER: JP 303878/1992  
FILING DATE: 13-NOV-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Hamburg, C. Bruce  
REGISTRATION NUMBER: 22,389  
REFERENCE/DOCKET NUMBER: F-4551  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 986-2340  
TELEFAX: (212) 953-7733  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1239 amino acids  
TYPE: amino acid  
STRANDEDNESS: single strand  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
ORIGINAL SOURCE:  
ORGANISM: mouse  
TISSUE TYPE: brain  
PUBLICATION INFORMATION:  
AUTHORS: Masayoshi MISHINA  
TITLE: NOVEL PROTEINS AND GENES CODING THE SAME  
RELEVANT RESIDUES IN SEQ ID NO: 3: FROM 1 to 1239

US-08-026-138E-3

Alignment Scores:  
Pred. No.: 0.000736 Length: 1239  
Score: 124.00 Matches: 94  
Percent Similarity: 30.63% Conservative: 23  
Best Local Similarity: 24.61% Mismatches: 112  
Query Match: 4.84% Indels: 153  
DB: 1 Gaps: 24

US-09-989-919-15 (1-1397) x US-08-026-138E-3 (1-1239):

QY 1196 AAGAAAGGCCCCGAGCCCCAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1137  
Db 927 ArgArgAlaProAlaPro-----ThrThrSerGlyPro----- 937  
QY 1136 CCCAGTCTGGCTATGCTGAGTGTGACCTTGCCTTACCCCTGAG----- 1086  
Db 938 -----ArgSerCysThrProGlyPro-----ProGlyInProSer 949  
QY 1085 ---CTGGCTGGAGATGCTCCCTGTCGGAGTCAAGATACCTCCCAAGTACAGAT 1029  
Db 950 ProSerGlyTrpArgProPro-----GlyGlyGlyArg-----ThrProLeuAlaArgArg 966  
QY 1028 CAGCAGATCTGAGAGATCCCGGCAAGTCTCTGCTGCTGCTGCTGCTGCTGCT 969  
Db 967 AlaProGlnProProAlaArgPro-----GlyProAlaGln----- 978  
QY 968 CTTCAGATGATTTGCTCCAGCAGAGCCCCAGCAGCAGCAGCAGCAGCAGCAG 909  
Db 979 -----GlyArgLysSerProThrCysProGlyHis----- 988  
QY 908 CAGCAGGAGCTTACATATTCATATTAAGACAGATGAGGAGCTGCCACGGA 849  
Db 989 -----ProAlaGlyThrLeuGlyMetArgGlyGlyInCysGlySer 1002  
QY 848 ACCGTCACAGGAGGAGGAGCAGCCCCAGTGGAGAGACTAGCTG-----AGCTTG 798  
Db 1003 GlyIleArgAspArgThrSerArgProProGlyAlaArgAlaLeuProGlyArgSerLeu 1022  
QY 797 CTTCAGAGCCAG-----AGGTTGAGAGAGGAGCAGTC 768  
Db 1023 LeuHisAlaHisCysHisIleTySerSerPheProArgAlaArgSerGlyArgProPhe 1042

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QY 767 ATACCCCATGATTCCTGAGACTAGAGCCAGCA-----GTCCCATAGTAGGC 720
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1043 LeuPro-----LeuPheProGluProProGluProAspAspLeuLeuGly 1059
QY 719 TGGTAAATCATCATTTTAAACATTGTCATTATTCACGTTTGTCTGTGACATCTGTCT 660
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1060 ---ProGluGluLeuAlaArgAlaLeuLeuArgAlaAlaLeuProAla 1075
QY 659 GTCTGGAGTGTAGCTTTGTCTGAGGGTTCAGG---TGACATGAGCTGTGCGAGT 603
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1076 -----ArgGly-ProArgProArgHisLeuLeuProse 1087
QY 602 GCAAGTC-----ACTCCCTTCACAGGCAAGCCAGC---TGCTGAGATAGTC 558
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1087 rServalAlaGluAlaPheThrArgSerLeuProLeuProAlaArgCysThrGlyHisAl 1107
QY 557 AGCTGTGACCCGAGCCCTCAGATAGGTGACGACGAGGCTTCACATATGTGTTGTT 498
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1107 acyAlaCysProCysPheGln----- 1114
QY 497 GGGATCAGGACCACTTGCTGCTCATCCAGTCTTGAAAAGACAGCTGCCGA----- 446
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1115 -----SerArgProSerCysArgHisValAl 1123
QY 445 -----CTGGGGGGGACAGAGGTGAGAGTAAACAGGCTGATGT 408
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1123 agInThrGlnSerLeuArgLeuProSerTyrArgGluAlaCysValGluGlyAlProAl 1143
QY 407 TTCTCTTTCTGAGGACCAACATCTCTCCTAAATTGACTGCTTGAAGACAGTATACC 348
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1143 aglyValAlaAla-----ThrTrpGlnPr 1151
QY 347 TCTCTCTCAT-----CACCTCAGACACCCCTGACTCCATGGGAGTACTAT 297
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1151 oArgGlnHisValCysLeuHisThrHisThrHisLeuProPheCysTrpGlyThrValCy 1171
QY 296 CTAATCAACCTCCAGAGAGTCTGACCATCTCCCTTGAGAGGGCTTCCACATGGCTCAC 237
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1171 sArgHisProProProCysSerSerHisSerProTrp----- 1183
QY 236 CTGTCCAGGTGTCTGTGTTGT-----GACCACAAAGGCCGACACTGG 192
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1184 -----LeuIleGlyThrTrpGluProProSerHisArgGlyArgThrLeuG 1199
QY 191 CATG 188
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1199 yLeu 1200

RESULT 4
US-09-252-991A-20570
; Sequence 20570: Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-07-27
; PRIOR APPLICATION NUMBER: US 60/094,190
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 20570
; LENGTH: 439
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
; NAME/KEY: UNSURE
; LOCATION: (250)
; OTHER INFORMATION: Identity of amino acid at the above locations are unknown.

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US-09-252-991A-20570
Alignment Scores:
Pred. No.: 0.0012
Score: 120.00
Percent Similarity: 29.48%
Best Local Similarity: 24.26%
Query Match: 4.75%
DB: 4
Gaps: 25

US-09-989-919-15 (1-1397) x US-09-252-991A-20570 (1-439)
QY 16 CCGAGCGGGCAGTATCTGACAGACTCCAGCGCAAGCAGTACCGAGTACAGTAT 75
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 77 ProHisArgProAspAlaIleGluLeuHisArgAlaHisArgGlnArgSerAlaLeu 96
QY 76 CCCAGA-----CAGACCATATCCCGAGAAAGACTACCGCTGTGCACTTCAACA 126
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 97 ProArgGlyAspProArgGlnHisProPro-----ArgLeuGlyAlaAspLeuPro 113
QY 127 CCACGGAGCTGCTCTTTCAGTGTCACTGCTGAGCTGTGATGTCTGTAGAG 186
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 114 -----ThrLeuProThrProGlyLeuArgPro----- 122
QY 187 CCATGCCAGTGTGGGCTTTGTGATCAACAACAGACCACTGACAGTACCACT 246
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 123 -----GlyArgAlaArgHisArgProGlyArg-HisGlyGlyValAspAl 137
QY 247 GGGAGAGCCCTTCCAGGAGATGACAGACCTCTGTGAGTGTATGATATGATGCC 306
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 137 aaIaGlnHis-----ProArgAspAlaArgGlyAlaLeuTrpArgAlaAspAsp 153
QY 307 CCATCGAAGTACAGAGGGGGTGTGAG-----GTGATGAGAGAGGTATAC 354
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 154 -----ArgArgGlyAlaGlnHisProGlnArgThrProArgArgSerHis 169
QY 355 GTGTCTTCAGGACAGTCAATTAAGGAGATGCTTGTCTCCAGAAAGAGA-----AA 408
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 169 sArgLeuHisAlaAlaThrArgSerGlnGlyAlaAspHisArgLeuArgIleProArg 189
QY 409 CATCCAGCCCTGTACCTTACCTCCTGCCCCCAGGTGGGAGCTGTCTTTTCACA 468
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 189 gGlyAspProCysAspGlnHisArgTyrAlaArgProProAlaAlaGlyValArgArgGlnArg 209
QY 469 C-----TGAGTGGAGCCAAAGTGTCTCTGATCCCAAGAACACATATGTGAAG 519
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 209 gProArgValAlaTrpArgArgProProGly----- 218
QY 520 CCTGTGCTGACCTATCTG-----AGGGCTGGGCTGACCCAGCTGACTATC 564
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 219 ---TrpArgThrGlyLeuArgGlyValAlaAlaArgArgGlyArgProAlaValArgLeuG 237
QY 565 CTCAGAGCTGGGCTTGGCTGTGAGAGG---AGTACTTGACCTGACAGCATGATGC 621
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 237 yMetAlaProGlyArgValAlaGlyAspLeuAlaGlu**HisLeuGlyHisHisArgG 257
QY 622 ACCT-----GGGAACCCCTGCAGACAAAGACTAATCCAGACAGACAGA 666
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 257 nProGlnGlyArgGlyLeuProSerProArgArgLeuProGluValArgAlaGlyGlnProAs 277
QY 667 TGTGACAGAGCAAAAGTGCATTAATGCCAAATGTTAAATGTGATTAACAGCTTAC 726
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 277 p-----AspLeuVal 280
QY 727 TATGGACTGTGCTCTTATGTCAGGAATCATGGGGGTATAGCTCTCTCAACCTCG 786
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 280 HisGly-----ProAlaProGlyVal-----ProLeuAspProAl 292
QY 787 TGGGCTGTAAGCAAG-----TCAGGCTAGTCTGC 816
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 292 aaAspValProLeuGlnArgLeuValLeuSerValAspGlyAspArgAlaGlyArgArgPr 312
QY 817 CCACTGGGGGCTGTGCTCTCTCCCTGGGAGCGTTCCTGGGACAGCCCATCATGTGTTC 876

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Db      312 oarg-----LeuProAlaAlaGlyArgSerAlaLysGlyProHis----- 325
QY      877 ATAGTGTGAGAAAGTAGTAAGAGCCCTGCTGGCTGGCTGCA----- 919
Db      326 -----ProAsrProArgAlaProGlyGlnProProValAlaArgAlaHisValGAl 342
QY      920 -----CATGCCACAGAGAGC-----GGTGGGGGCTG 945
Db      342 aglnArgProAsrGlnHisValAlaArgPheGlyGlnGlyArgHisValGProProGlyAlaCy 362
QY      946 CTTGGGACATCATCATCTGAGAGTGTCTGACGTTAGCTTGACAGAGACATTTGGCG 1005
Db      362 shiGlyArgArgArgAla-----ThrGlyGlnGlyAsrArgArg 376
QY      1006 GGGG----- 1009
Db      376 gglGlyArgArgArgLysHisProLysHisProCysLeuArgProHisValGlyLeuArgPr 396
QY      1010 -----ATGCTCCAGAGATGGGT----- 1027
Db      396 oGlyHisGlyLeuArgLeuAlaArgArgValGlyArgProAlaAlaGlyAlaThrArgArg 416
QY      1028 -GATTGTGA--CTGGGAGAGCTATCTGTGACCTCCGACAGGGAGACATCCAGGCG 1083
Db      416 gaAsrGlnValAlaProGlyArgAlaLeuProAsrProArgArgGlyAsrGlyArgPr 436
QY      1084 A 1084
Db      436 o 436

RESULT 5
US-09-467-997-1
; Sequence 1, Application US/09467997
; Patent No. 6379925
; GENERAL INFORMATION:
; APPLICANT: Kiteajewski, Jan
; APPLICANT: Dytleendaale, Hendrik
; TITLE OF INVENTION: ANGIOGENIC MODULATION BY NOTCH SIGNAL TRANSDUCTION
; FILE REFERENCE: 53863-A-PCT-US
; CURRENT APPLICATION NUMBER: US/09/467,997
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1964
; TYPE: PRT
; ORGANISM: mouse
US-09-467-997-1

Alignment Scores:
Pred. No.: 0.00232 Length: 1964
Score: 120.00 Matches: 128
Percent Similarity: 28.72% Conservative: 38
Best Local Similarity: 22.15% Mismatches: 193
Query Match: 4.75% Indels: 220
DB: 4 Gaps: 36

US-09-989-919-15 (1-1397) x US-09-467-997-1 (1-1964)
QY      6 TGCACCTGTATCCGAGCGGAGCAGATCTGCAGAAATCCACAG-----CAAGACAGAGTA 59
Db      903 CysAlleAsrThrAlaLysSerSerTyrrheCysArgCysArgProGlyPheGlnGlyLysLeu 922
QY      60 CCGAGTACACAGTGTATCCGACAGACAGCAGCATCCCCAG----- 97
Db      923 CysGlnAsrAsnValAsnProCysGlnProAsnProCysHisHisGlySerThrCysVal 942
QY      98 -----GAAGACTAC-----CGCTGTGGCCATCTTACCAACACAGGAGACTGCTTC 142
Db      943 ProGlnProAsrGlyArgValCysGlnCysAlaProGlyArgGlyGlnAsnCys--- 961
QY      143 CTTTCAGTGTTCACACTGGCTGAGGCTGTGATGTCTGTAGAGCATGCCAGTGTGCG 202

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Db      962 -----SerLysValLeuAsrAlaCysGlnSerGln---ProCysHis 974
QY      203 GCGTTTGTGTACCAACAGACACACCTTGACAGAGTGAACCCAGTGGAGAA-----GCC 256
Db      975 -----AsnHisValLysThrCysLysSerArgProGlyLysLysHisValCysVal 989
QY      257 CTTTCAAGGAGATGAGCAGACCTCTGTGAGAGTTG-----ATAGATAGT----- 301
Db      990 CysArgProGlyPheValGly-----LeuArgCysGlnGlyLysArgAlaArgGlyCysLeu 1007
QY      302 GATCCSSCATGCGAAGTCAAGAGGGGCTG-----GAGGTATGACAGACAGTAT 352
Db      1008 AsrArgProCysHisAsrProSerGlyThrAlaAlaCysHisSerLeuAlaAsnAlaPheTyx 1027
QY      353 -----ACGTGTTTCAAGC----- 367
Db      1028 CysGlnCysLeuProGlyHisThrGlyGlnArgCysGlnValGlyMetAsrLeuCysGln 1047
QY      368 ACTCAAAATTAAGGAGATGCTGTGCTGCTCCAGAAAGAGAAATCCAGGCT-----GT 421
Db      1048 SerGlnProCysSerAsnGlyLysSerCys-GlyLysThrGlnGlyProProProGlyLys 1067
QY      422 TACCTTCACTCTGCCCCCAGTCCGAG----- 452
Db      1067 ethrCysHis---CysProLysGlyPheGlnGlyProThrCysSerHisLysAlaLeuSe 1086
QY      453 -----CTGCTCTTTTCAAGACTGATGAGGCCAAGTGGCTCTGATCCCAACAGACAC 508
Db      1086 rCysGlyLysHisValCysHisAsnGlyLysLeuCysLeuProSerPro----- 1102
QY      509 ATATGTAAGGCTGTGCTGACT-----ATCTGAGGCTGGCTGACCA-- 554
Db      1103 -----LysProGlySerProProLeuCysAlaCysLeuSerGlyPheGlyGlyProAs 1120
QY      555 -----GCTGACTATCTCAAGCAAGCTGGAGCTTGCCT-----GTGAGAGAGT 595
Db      1120 rCysLeuThrProProAlaProProGlyCysGlyProProSerProCysLeuHisValGAl 1140
QY      596 GACTTGACATGGCAGACATGCATGCATCTGGGAAACCTTCGACAGACAAAGCTAACATCCC 655
Db      1140 ythrCysThrGlnLysProGly-----LeuLysAsnProGlyPheGlnCysThrCysArg 1158
QY      656 AGACAGACAGATGTGACGACAAACGTCGAAAT----- 689
Db      1158 oProAsrSer-----ProGlyProArgCysGlnArgProGlyAlaSerGlyCysGlyGAl 1176
QY      690 -----AATGCCAAATGTTAAATGTGAGTTTACAGCCTTACCT 727
Db      1176 yArgGlyLysArgLysThrCysAsrAlaGlyCys-----SerGlyProGlyLysLys 1193
QY      728 ATGGGAC----- 734
Db      1193 rThrAsrGlyLysAsrCysSerLeuGlyValProAsrProTrpLysGlyCysArgProHis 1213
QY      735 -----TGCCTGCTCTTATGCCAGAAATCATG----- 761
Db      1213 sSerGlnCysTrpLeuPheArgPheArgLysArgCysHisProGlnCysAsrSerGlyGAl 1233
QY      762 -----GGGTAGACTGCTCTCCAGCCTGTG----- 788
Db      1233 uCysLeuPheAsrGlyTyrrAsrCysGlyLysLeuProProThrCysLysLeuAlaTyrrAsrGAl 1253
QY      789 -----GCGTGTAAAGCTCAGGC 808
Db      1253 nTyrrCysArgAsrHisPheHisAsnGlyHisCysGlyLysValCysAsnAsnValAlaGlyCys 1273
QY      809 TAGTCTCCCACTGAGGGGCTGCGCCCTCCGAGAGGCTTCCGAGGAGGAGCCATAC 868
Db      1273 ValTyrrAsrGlyLysAsrCysArgProGlyLysLysAsrSerGlyLysArgProSerLys 1293
QY      869 TGTGTTCATATAGTGTGAGATGATGATTAAGCCCTGCTGCTGCTGCTGACATGTCACA 928

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Db      1293 uala-----LeuLeuValValLeuArgPro-- 1302
Qy      929 GAGGGGGTGGGGCTGGGGAGCAATCATCGTGGAGTCTCTCAGCTTAGCTCT 988
Db      1303 -----AlaLeuAspGlnGlnLeuAlaLeuAlaArgValLeuSerle 1317
Qy      989 GACAGAGACTGGCGGGGGATGCTCCAGATGTGGGTGATTCTGTACTGGGAGGCT 1048
Db      1317 uThrlaArgValGly-----LeuTrpVal-----Argly 1327
Qy      1049 ATCTTGACCTCCCGACAGGGGACACTCCCA----- 1079
Db      1327 saPserGlnGlyArgAsmMetValPheProTyProGlyThrArgAlaLeuGlnGluLe 1347
Qy      1080 -----GGCCAGCCCGAGGGGTCAGGGGTCAGAGTGCACCTCAGATGAGCCA----- 1127
Db      1347 uSerGlyAlaArgAspSerSerSerTrpGlnArgGlnAlaProProThrGlnProLeuGln 1367
Qy      1128 -----AGACTGGGCTCAGG-----AGCAG 1147
Db      1367 ylysgluthrGlnSerleuGlyAlaGlyPheValValMetGlyValAspLeuSerAr 1387
Qy      1148 GTGTGTTGAGCCAGGACCTGGGGCGG---GGGTGGGCGCGGCTTTCTGCTCATT 1204
Db      1387 gCyGlyProGlnHisProAlaSerArgCysProTrpAspSerGlyLeuLeuLeuArgPh 1407
Qy      1205 TGCTTCATGAAGACCTCAAGCAGCCAAACAGGCTTCCCTTCCTCCTC 1256
Db      1407 eLeu-----AlaAlaMetAlaAlaValGlyAlaLeuGlnProLeuLeu 1421

RESULT 6
US-08-093-453B-3
Sequence 3, Application US/08093453B
Patent No. 543814
GENERAL INFORMATION:
APPLICANT: Frey, Teryl K.
APPLICANT: Dominguez, Geraldina.
APPLICANT: Wang, Chin Yen
TITLE OF INVENTION: Modified Infectious Rubella Virus
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Jamie L. Greene, Jones & Askew
STREET: 191 Peachtree Street, 37th Floor
CITY: Atlanta
STATE: Georgia
COUNTRY: United States
ZIP: 30303
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50
COMPUTER: Macintosh
OPERATING SYSTEM: 7.0
SOFTWARE: Microsoft Word
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/093.453B
FILING DATE: 19 JUL 1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: U.S. 07/722,334
FILING DATE: 28 JUN 1991
ATTORNEY/AGENT INFORMATION:
NAME: Greene, Jamie L.
REGISTRATION NUMBER: 32,467
REFERENCE/DOCKET NUMBER: 07362-0101
TELECOMMUNICATION INFORMATION:
TELEPHONE: 404 818-3700
TELEFAX: 404 818-3799
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 1063 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide

```

```

; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: C_terminal
; ORIGINAL SOURCE:
; ORGANISM: Rubella virus
; STRAIN: Thelien
US-08-093-453B-3

Alignment Scores:
Pred. No.: 0.00224 Length: 1063
Score: 119.00 Matches: 96
Percent Similarity: 31.65% Conservative: 36
Best Local Similarity: 23.02% Mismatches: 136
Query Match: 4.65% Indels: 149
DB: 1 Gaps: 20

US-09-989-919-15 (1-1397) x US-08-093-453B-3 (1-1063)
Qy      1184 GCCCAACCCCGCCCAAGCTCTGGCTCAAC-----ACACTGCTCTCTGACCC 1134
Db      77 AlaProProProGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGln 96
Qy      1133 CAGTCTTGCTATGCTAGAGTGTGACCTCTGCTGACCCCTGACCCCTGGGCTGGAG 1074
Db      97 SerArg-----AlaPro-----ProGlnGlnProGln----- 105
Qy      1073 TGCCCTGTGGAGAGTCAGATAGCTCCCAAGTACAG-----AAT 1029
Db      106 -----ProProArgMetGlnThrGlyArgGlySer 116
Qy      1028 CACCCACATCTGAGACATCCCGCCCAAGTCTCTGTCACCACTTAAGTGAAGA--- 972
Db      117 AlaProArgProGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGln 136
Qy      971 -----ACACTCCAGATGATTTGCCACGACGACCCCAACCGCTGCTGT----- 926
Db      137 LeuArgProProLeuHisAspPro--AspThrGln-AlaProThrGlnAlaCysValTh 155
Qy      925 -----GGCATGTGACGACGACGACGAGGGGCTTTAGCTCATCTTGCATTTGAACAC 870
Db      155 rSerTrpLeuTrpSerGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGln 175
Qy      869 AGTGAAGGGGCTGCCCGCAACCGTCCAGGA----- 836
Db      175 rAsnLeuGlnThrProProLeuAspGlnAspGlyArgTrpAspProAlaLeuMetTyAs 195
Qy      835 -----GGGACACAGCCCCCAGTGGGAGACTAGCTTACGCTTGTTACGCCACAG 783
Db      195 nProCysGlyProGlnProPro--AlaHisValValArgAlaTyAsnGlnProAlaGln 214
Qy      782 GTTGAGAGGACAGTATACCCCATGATTCCTGAGCTAGAGCCAGAGTCCCATAGCTA 723
Db      214 yAspValArgGlyValTrpGlylysglyGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGln 234
Qy      722 GGCTGTAAATCATCAATTTAACTTTGGCAATTATTCAGCGTTTCTGTCATCACTCG 663
Db      234 lGlyGly-----ThrArgTrpHisArgLeu-----ArgMetPr 246
Qy      662 TCTGTCTGGAGTGTAGCTTTGTCTGACAGGGTTCACAGTACATGACAGTGTGCAAT 603
Db      246 oValArgGlyLeuAspGlyAspSerAlaProLeuProPro--HisThrThrGlnGlnGln 265
Qy      602 GCAAGTCACCTCCCTCCACAGGCAAGCCAGCTGCTAGATAGTACAGTGTGACCG-- 545
Db      265 eGlnThrArg-----SerAlaArgHisProTr 274
Qy      544 -AGCCCTCAGATAGTACACGACGAGCCCTTCAATATGATGCTTTGGATCAGAGAC 486
Db      274 pArgIleArgPheGlyAlaProGlnAlaPheLeuAlaGlyLeuLeuLeuAlaThrValAl 294
Qy      485 CACTTGCTTCATCCAGCTCTTGAATAAAGACCACTCCGACCTGGGGGAGAGGTGAGA 426
Db      294 a-ValGlyThrAlaArgAlaGlyLeuGlnProArgAlaAspMet----- 308

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QY      425 GGTAACAGGAGCTGATGTTCTTCTTCTGAGGCAAGACCATTCTCCATAATTGACTGC 366
DB      308 -----
QY      365 CTTGAAGACAGATATCTCTCTCATCACTCAGACACCCCTGACTTCGATGGAG 306
DB      309 -----
QY      305 GATCACTATCTATCAACTCTCAGAGAGTCTCCATCTCCCTTGAAGAGGCTTCCCA 246
DB      318 -----
QY      245 CTGGCTCACTCTGCTCAGTGTCTGTTGATGACCAAGGCCGACATGGGCAATGCG 186
DB      319 CysAlaHisGlyGlnHisTyrGlyHisHisHisGlnLeuProHeuGlnHisAsp 338
QY      185 TCTCAGACATCCACAGCCTCAGCAGGTTGAACATAAGAGAGGAGCTCCGCTGCT 126
DB      339 GlyHisHis-----GlyGlyThrLeuArgVal 347
QY      125 GTTAGATGGCCAGCAGCGCTAGT-----CTTCTGGGGGATGG 87
DB      348 GlyGlnHisTyrArgAsnAlaSerAspValLeuProGlnHisTyrLeuGlnGlyTyr 367
QY      86 TCTCTGTCTGGA-----TACACTGTAAGTCTGTAATGCTG 54
DB      368 GlyCysTyrAsnLeuSerAspTyrHisGlnGlyThrHisValCys 382

RESULT 7
US-07-960-389-2
; Sequence 2, Application US/07960389
; Patent No. 5705611
;
; GENERAL INFORMATION:
; APPLICANT: HAYASHIDA, Kasuhiko;
; TITLE OF INVENTION: Human GM-CSF Receptor Component
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Schering-Plough Corporation
; STREET: 2000 Galloping Hill Road
; CITY: Kenilworth
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 07033
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy Disc
; COMPUTER: Apple Macintosh
; OPERATING SYSTEM: System Software 7.1
; SOFTWARE: Microsoft Word 5.1a
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/960,389
; FILING DATE: 07-JAN-1993
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 554,745
; FILING DATE: 18-JUL-1990
; APPLICATION NUMBER: PCT/US 91/04846
; FILING DATE: 16-JUL-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Blasdale, John H. C.
; REGISTRATION NUMBER: 31,895
; REFERENCE/DOCKET NUMBER: DX01430
; TELEPHONE: (908) 298-2902
; TELEFAX: (908) 298-5388
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 897 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:

```

```

; OTHER INFORMATION: Human GM-CSF receptor; Signal Sequence: -17 to -1; Traneme
; US-07-960-389-2

Alignment Scores:
Pred. No.: 0.00263
Score: 118.00
Percent Similarity: 34.37%
Best Local Similarity: 23.06%
Query Match: 4.61%
DB: 1
Gaps: 22

US-09-989-919-15 (1-1397) x US-07-960-389-2 (1-897)

QY      1221 GGCTTTCATTGAAGCAATGAGGAGCAAGAGCCGCCGCCAGCCCGCCAGAGTCT 1162
DB      464 GlyIleTyrGlyTyrArgLeuArgArgIleTyrGlnGlyIleProAsnProSerIys 483
QY      1161 GGC-----TCAACCAACCTGCTCTCCAGCCCAAGTCTGCTATGCTAGAGTG 1111
DB      484 SerHisLeuPheGlnAsnGlySerAlaGlnLeuTyrProGlnGlySerMetSerAlaPhe 503
QY      1110 TGCACTCTGCCCCCT-----GACCCCTGGGCTGGCCTG-----GGA 1075
DB      504 ThrSerGlySerProProHisGlnGlyProTyrGlySerArgPheProGlnLeuGlnGly 523
QY      1074 GTGTCCCTGTC-----GGAGAGTCAGAGATAGCCTCCAGTAGAGACAATCACCACA 1021
DB      524 ValPheProValGlyPheGlyAspSerGlnVal-----SerProLeu 537
QY      1020 TCTTGAGACATCCCGCCGCAAGTCTCTGTCCAGACTAAGCTAGAGACAATCACCACA 961
DB      538 ThrIleGlnAspProGlyHisHisValCysAspProProSerGlyProAspThrProAla 557
QY      960 TGGATT---GTCCCCACG-----CAGCCCCCAGCCGCTCTGTGCA 922
DB      558 AlaSerAspLeuProThrGlnGlnProProSerProGlnProGlyProProAlaAlaSer 577
QY      921 TGTGAGAGACAGACAGAGGGGCTTAGCTA----- 891
DB      578 HisThr-ProGlnGlnAlaAlaSerSerPheAspPheAsnGlyProTyrLeuGlyProPr 597
QY      890 -CATTTCGACATATTGAACACAGTATGAGGAGCTCCGACGAAACGTCGCCAGGAGGG 832
DB      597 HisSerArgSer-LeuProAspIleLeuGlnGlnProGlnProGlnGlnGlyIys 617
QY      831 CACAG-----CCCCAGTGGGAGACTAGCTGACTTGTACAGCCACAGGCTTGG 778
DB      617 erGlnIysSerProProProGlySerLeuGlnIuTyrLeuGlySerLeu--ProAlaGlyGlyG 636
QY      777 AGAGCAGTCATACCCCATGATTCCTGAGCTAGAGGACAGACATCCATAGCTAGGCTG 718
DB      636 InValGlnLeuValPro----- 641
QY      717 GTAACACATTTTAACATTTGGCATTTATGACGTTTGTCTGTCATCTGCTGT 658
DB      641 ----- 641
QY      657 CTGGAGATTGACTTGTGCTGAGGGGTTCCAGAGTACATGACAGTCTGCCAGTGCAG 598
DB      642 -----LeuAlaGlnAlaMetGlyProGlnGln-----AlaValGlnValGlnA 656
QY      597 TCACCTCCTCCACAGGCAAGCCAGCTCTAGATAGTACAGCTGCTGACGAGGACCTTC 538
DB      656 rgArgProSerGlnIly-----AlaAlaIlySerProSerLeuG 669
QY      537 AGATAGTCACAGCAGAGGCTTTCACATATGTGTCCTTGTGGATCAGAGACCACTTGAC 478
DB      669 IuSerGlyGly-----GlyProAlaProProAla 679
QY      477 TCATCCAGTCTTGAAGAAAGACAGCTGCCAGCTGGGGGGGAGAGTGAAGTAACAG 418
DB      679 euGlyPro-----ArgValGlyGlyGlnAspGlnIlyAspSerP 692

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QY 417 GCGTGAATGTTCTCTTTTGAGGAGACATCTCCCTAATTGACTGCTTGAGA 358
   ::::: ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 692 rovalAlaIleProMetSerSerGlyAspThrGluAspProGlyValAlaSerGlyTyrV 712
QY 357 CACGTAATCTCTCTCTCTCATCACTGACGACCCCTCTGACTTCCGATGGGGATCACTA 298
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 712 aIser-SerAlaAspLeuVal-----PheThrProAsnSerGlyAlaSer 726
QY 297 TCATCAACCTC-----CAGAGAGTCTGTCATCTCCCT 262
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 727 SerValSerLeuValProSerLeuGlyLeuProSerAspGlnThrProSerLeuCySpro 746
QY 261 GGAAGGAGCTTCT---CCCACTGCTCACTGTCAGGTG----- 226
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 747 GlyLeuAlaSerGlyProProGlyAlaProGlyProValLysSerGlyPheGlnGlyTyr 766
QY 225 GTCTGTGTTGTGACACCAAGGCCGACACTGGGCGATGCTTCACAGACATCCACAGCC 166
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 767 ValGluLeuProProIleGluGlyArg-SerProArgSerProArgAsnAsnProValIleP 786
QY 165 T-----CAGCAGGTTGAACACTGAAAGAGAGCTCCCG 130
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 786 oProGluAlaLysSerProValLeuAsnProGly-----GluAr 799
QY 129 TGGTGTGAGATGACGACGACGCGTGTCTTCTGGGGAGATGCTGTGGATATAC 70
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 799 gProAlaAspValSerProThrSerProGlnProGluGlyLeuLeuValLeuGlnGlnVa 819
QY 69 TGGTACTCGGTACTGCTGCTTCCG 45
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 819 lGlyAsp---TyrCySphLeuPro 826

```

## RESULT 8

```

US-09-266-225D-18
; Sequence 18, Application US/09266225D
; Patent No. 6573364
; GENERAL INFORMATION:
; APPLICANT: Nandabalan, Krishan
; APPLICANT: Kingmore, Stephen
; APPLICANT: Tchernev, Velizar
; TITLE OF INVENTION: Isolation and Characterization of Hermanby-Pudlak
; TITLE OF INVENTION: Syndrome (HPS) Protein Complexes and HPS Protein-
; FILE REFERENCE: 15966-523
; CURRENT APPLICATION NUMBER: US/09/266,225D
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 18
; LENGTH: 1184
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-266-225D-18

```

## Alignment Scores:

```

Pred. No.: 0.00377 Length: 1184
Score: 117.00 Matches: 92
Percent Similarity: 32.23% Conservative: 34
Best Local Similarity: 23.53% Mismatches: 140
Query Match: 4.57% Indels: 125
DB: Gaps: 20

```

US-09-989-919-15 (1-1397) x US-09-266-225D-18 (1-1184)

```

QY 1190 GCCCGGCCCCCACC----- 1176
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 365 AlAProAlaProMetArgPheProTyrSerSerSerSerSerAlaAla 384
QY 1175 -----CCGCCAGGCTCGGCTCAACACACA 1149
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 385 SerSerSerSerSerSerSerSerSerSerAlaSerProPheProAlaAlaLeu 404
QY 1148 CTGCT-----CCCTGACCCCACTTGCTCATGTGAGGTGACACT 1104

```

```

Db 405 ProSerTyrProHisSerPheProProProHisSerLeuSerValSerAsnGlnProPro 424
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 1103 CTGCCCTGACACCCCTGGGCTGCTGAGGTGTCCCTGTGCGAGGCTCAGATAGCCT 1044
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 425 LysTyrThrGlnProSerLeuProSerGlnAlaValIlePheSerGlnGlyProProProPro 444
QY 1043 CCCGAG-----GTACAGATACACCCACATCTCTGAGCATCCCGCCCAAG 999
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 445 ProProTyrGlyArgLeuLeuAlaAsnSerAsnAlaHisProGlyProPheProPro--- 463
QY 998 TCTCTGTCCAGACTTAAGCTGAGAGAACCTCCACGATGATTTGCTCCACGACGCC 939
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 464 -----SerThrGlyAlaGlnSerThrAlaHisProProValSerThrHisHis 480
QY 938 CACCGCTGCTGTGGCATGTGACAGCAGCAGCAGGAGGCTTTACTACAT----- 888
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 481 HisHisGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnGlnHisHisGlyAsn 500
QY 887 -----TCTCACTATTGAACACAGTGATGGGCTGCC 855
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 501 SerGlyProProProProGlyAlaPheProHisProLeuGlu-----GlyGlySerSer 518
QY 854 CACGGAACCGTCCCGAGGAGGCGCACAGCCCGCAGTGGGAGACTTACCTGAGCTTGTCT 795
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 519 HisHisAlaHisPro---TyrAlaMetSerPro-----SerLeuGlySerLeu 533
QY 794 ACAGCCCAAGGTTGAGAGGAGCAGTCAATACCCCATGATTCCTGAGACTAGAGCAGCA 735
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 534 ArgProTyrProProGlyProAlaHisLeuProPro----- 545
QY 734 GTCCCATAGCTAGGCTGTAACTCACTTTTAACTTTGACATTATGACGTTTGCC 675
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 546 -----ProHis-----SerGlnValSer 551
QY 674 TGGTCACTGTCTGTCTGGATGTAGCTTTGCTGAGGGGTTCCAGGTGACATCC 615
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 552 TyrSerGlnAlaGlyPro-----AsnGlyProProValSerSer 564
QY 614 AGTGTGCGCAGCAAGTCACTCCCTCCACAGCAAGCCACAGCTGTGAGATATGACAC 555
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 565 SerSerAsnSerSerSer-SerThrSerGlnGlySerTyrProCyS----- 579
QY 554 TGGTCAAGCCGACCCCTCAG-----ATAGGTACAGCAGAGGCTTCACATATGTGT 504
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 580 -SerHisProSerProSerGlnGlyProGlnGlyAlaProTyrProPheProProValPr 599
QY 503 CTGTGTGGATCAGGACCACTTGCTCCATCCAGTCTTGAAGAAAGACAGCTCCGAC 444
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 599 oThrValThrThrSerSerAlaThrLeuSerThrValIleAlaThrValAlaSerSerPr 619
QY 443 TGGGGGGCAGAGGTGAGAGTAAACAGGGCTGATGTTCTTTTGA----- 395
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 619 oAlaGlyTyrLys-----ThrAlaSerProProGlyProProProTyr 633
QY 394 -GGCAGAACCATTCCTCAATTGACTGCTTGAAGACAGCATATCTCTCATCA 336
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 633 rGlyLysArg---AlaProSerProGlyAlaTyrLysThrAlaThrProProGlyTyrTyr 652
QY 335 CCGTCAAGCCCGCTGACTTCGATGGGAGATCACTATCTTCAACCTCCAGAGAGTTC 276
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 652 sProGlySerProProSerPheArgThrGly-----ThrProPro----- 665
QY 275 CTGCCATTCCTCGTAAGGCTTCTCCACATGCGTCACTGTCAGAGGTGCTGTGG 216
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 666 -----GlyTyrArgGly-----ThrSerProProAlaGlyProGly 677
QY 215 TGACACACAA-----GGCCGACACTGGGC 191
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 677 yThrPheLysProGlySerProThrValGly 687

```

## RESULT 9

US-09-041-886-23





MEDIUM TYPE: Diskette  
 COMPUTER: IBM Compatible  
 OPERATING SYSTEM: DOS  
 SOFTWARE: FastSeq Version 2.0  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/783,774  
 FILING DATE: 15-JAN-1997  
 CLASSIFICATION: 435  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Coruzzi, Laura A.  
 REGISTRATION NUMBER: 30,742  
 REFERENCE/DOCKET NUMBER: 7682-037  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 212-790-9090  
 TELEFAX: 212-869-8864  
 TELEX: 66141 PENNIE  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 907 amino acids  
 TYPE: amino acid  
 STRANDEDNESS:  
 TOPOLOGY: unknown  
 MOLECULE TYPE: protein  
 US-08-783-774-2

## Alignment Scores:

| Pred. No.:             | 0.00538 | Length:       | 907 |
|------------------------|---------|---------------|-----|
| Score:                 | 115.00  | Matches:      | 90  |
| Percent Similarity:    | 32.77%  | Conservative: | 46  |
| Best Local Similarity: | 21.69%  | Mismatches:   | 117 |
| Query Match:           | 4.49%   | Indels:       | 162 |
|                        |         | Gaps:         | 18  |

US-09-989-919-15 (1-1397) x US-08-783-774-2 (1-907)

```

QY 1182 CCCACCCCGCCCGAGT---CCTGGCTCAACACACAC---1147
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 442 ProAsnThrThrThrGlyLeuProSerSerThrHisValProThrAsnLeuThrAlaPro 461
QY 1146 TGTCTCCCTGACCCCGAGTCTGGCTCATGCTGAGTGTGACCTCTGCCCTGACCCCTGG 1087
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 462 AlaSerThrGlyProThrValSerThrAlaAspVal---ThrSerPro---476
QY 1086 GCTGGCTGGAGATGTCCTGTCGGAGAGTCAAGATAGCTCCCGAGGTACAGATCA 1027
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 477 -----ThrProAlaGlyThrThrSerGlyAlaSerProValThrProSer 491
QY 1026 CCCACATCTGAGACATCCCGCCGCAAGTCTCTGTCAGACCTAGCTGAGAGAACT 967
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 492 ProSerProThrAspAsnGlyThrGlySerLeuAlaProAspMetThrSerSerThrSer 511
QY 966 CCAAGATGATGTCTCCCGACGACGCCCGCTGCTGTGCAATGTGACAGACAGCA 907
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 512 Pro-----ValThrThrProThrProAsnAlaThrSerProThrProAlaVal 527
QY 906 GCAAGGGCTTTACTACATCTCACTATTAACACAGAGATGGGGCTGCCACGGAAC 847
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 528 Thr-----528
QY 846 CGTCCAGAGGAGGAGCAAGCCCGCAGTGGGAGACTAGCTGAGTTGCTTACAGCCCA 787
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 529 -----ThrPro 530
QY 786 CAGGGTTGAGAGGACGATACCCCATGATT-----754
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Db 531 ThrProAsnAlaThrSerProThrProAlaValThrThrProThrProAsnAlaThrSer 550
QY 753 CCGAGCTAGAGGACGAGCTCCCATAGCTAGAGGTGTAAACACATTTTAATTGG 694
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 551 ProThrLeuGlyThrSerProThrSerAlaValThrThrProThrProAsn-----568
QY 693 CATTAATGCAAGTTTGCTGTCACATCTGTCTGAGGAGTTAGCTTGTCTGACG 634
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||

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Db 569 -----AlaThrSerProThrLeuGly-LysThr-----SerPr 579
QY 633 GGGTCCAGATGATGATGAGTGTCTGCAAGTCACTCCCTCCACAGGCAAG-----578
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Db 579 cthrSerAlaValThrThrProThrProAsnAlaThr-SerProThrProAlaValThr 599
QY 577 -----CCAGCTGTGAGGATAGTACAGTGTGACG 547
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 599 erProThrSerAlaValThrThrProThrProAsnAlaThrGlyProThrAlaGlyLys 619
QY 546 CAGGCTTCAG-----536
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Db 619 hrSerProThrAlaAsnAlaThrAsnHisThrLeuGlyLysThrSerProThrProVal 639
QY 535 --ATAGGTACGACGAGGCTTCACATATGTGTCTGTTGGATACGAGGACCACTTGGC 478
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 639 alThrSerGlnProLysAsnAlaThrSerAlaVal-----ThrThrGlyG 654
QY 477 TCCATCAGCTCTGAAAAGAAC-----AGTTCGCGACCTGGGGGAGAGGT 430
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 654 lnhIsanllehrSerSerSerThrSerSerMetSerLeuThrProSer-----670
QY 429 GAGAGGTAACAGGCTGATGTTTCTTCTTCTGAGGCAAGACATTCCTCTAATTGA 370
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 671 -----SerAsnProGlnThrLeuSerProSerThr 681
QY 369 CTGCTTGAAGACAGTATACCTCTCTCATCACTGACGACCCCTCTGACTTCCGAT 310
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 681 etAspAsnSerThrSer-HisMetProLeuThrSerAlaHisPro-----Thr 697
QY 309 GGGGATCACTATTCATCACTCCAGAGAGTCTGCTCATCTCCCTTGGAGGGCTTCTC 250
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 698 GlyGlyGlu-----AsnIle-ThrGlnValThrProAlaSerIle-----710
QY 249 CCACTGCTCACTGTCAGAGTGTGTGTGTGTGACCAAGAGCCGACACTGGGCA 190
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 711 -----SerThrHisIle 714
QY 189 TGGCTTCACAGACATCCACAGCTTCAGCGAGTTGAACATGAAGAGGACGCTCCG 130
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 714 sValSerThrSerSerProGlnProArgProGlyThrThr-----SerGlnAla 731
QY 129 TGGTGTAGATGAGCCAGCAGCGGTAGTCTTCCTGG 93
    |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db 731 rGlyProGlyAsnSerSerThrSerThrLysProGly 743

```

## RESULT 12

US-09-328-599A-1

Sequence 1, Application US/0932859A

Patent No. 6432679

## GENERAL INFORMATION:

APPLICANT: MORD, James J. and Lees, Andrew

TITLE OF INVENTION: Enhancement of B Cell Activation by

TITLE OF INVENTION: Co-Activation of Receptors for Antigen and Complement C3d

NUMBER OF SEQUENCES: 2

## CORRESPONDENCE ADDRESS:

ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &amp;

ADDRESSER: Dunner, L.L.P.

STREET: 1300 I Street, N.W., Suite 700

CITY: Washington

STATE: DC

COUNTRY: USA

ZIP: 20005

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC Compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

FILING DATE: US/09/328,599A

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:  
 NAME: Fordie, Jean B.  
 REGISTRATION NUMBER: 32,984  
 REFERENCE/DOCKET NUMBER: 04995.6025-00000  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (202)408-4000  
 TELEFAX: (202)408-4400  
 INFORMATION FOR SEQ ID NO: 1:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 907 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-09-328-599A-1

Alignment Scores:  
 Pred. No.: 0.00538 Length: 907  
 Score: 115.00 Matches: 90  
 Percent Similarity: 32.77% Conservative: 46  
 Best Local Similarity: 21.69% Mismatches: 117  
 Query Match: 4.49% Indels: 162  
 DB: 4 Gaps: 18

US-09-989-919-15 (1-1397) x US-09-328-599A-1 (1-907)

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 1146 TGCTCCCTGACCCCGAGTCTTGCTGATGAGGTGACCTCTGCCCTGACCCCTGG 1087  
 462 AlasSerThrGlyProThrValSerThrAlaSerVal-----ThrSerPro----- 476  
 1086 GCTGGCTGGAGGTGCTCCCTGCTGGAGGTGACAGATAGCTTCCCAAGTACAGATCA 1027  
 477 -----ThrProAlaGlyThrThrSerGlyAlaSerProValThrProSer 491  
 1026 CCCACATCTGAGACATCCCGCCGAGTCTCTGTCAGACCTCAAGCTGAGAGACACT 967  
 492 ProSerProTrpAspAsnGlyThrGlySerLeuAlaProAspMetTrpSerThrSer 511  
 966 CCAAGATGATGTGCTCCACAGCAGCCCGCCGCTGCTGATGAGTGCAGCAGCA 907  
 512 Pro-----ValThrThrProThrProAsnAlaThrSerProThrProAlaVal 527  
 906 GCAAGGGCTTACCTACATTTCTACACTATTGAACAGATGATGGGGCTGCCACGGAAC 847  
 528 Thr----- 528  
 846 CGTCCAGGAGGGGACAGGCCCGCAGTGGGAGAGACTAGCCTGAGCTTGTTACAGCCA 787  
 529 -----ThrPro 530  
 786 CAGGGTTGAGAGGAGCTATACCCCGATGTT----- 754  
 531 ThrProAsnAlaThrSerProThrProAlaValThrThrProThrProAsnAlaThrSer 550  
 753 CTGAGACTAGAGCAGCAGCTCCATAGCTAGAGTGAATCAATTTTACATTTGG 694  
 551 ProThrLeuGlyThrThrSerProThrSerAlaValThrThrProThrProAsn----- 568  
 693 CATATTGACAGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 634  
 569 -----AlaThrSerProThrLeuGly-LysThr-----SerPr 579  
 633 GGGTCCAGGTGATGATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 578  
 579 cThSerAlaValThrThrProThrProAsnAlaThr-SerProThrLeuGlyLysThrS 599  
 577 -----CCAGCTGCTGAGGATGACTGAGTCACTGCTGCTGCTGCTGCTGCTGCTGCT 547  
 599 exProThrSerAlaValThrThrProThrProAsnAlaThrGlyProThrValGlyLut 619

546 CGAGCCCTCAG----- 536  
 619 hSerProGlnAlaAsnAlaThrAsnHisThrLeuGlyGlyThrSerProThrProValY 639  
 535 --ATAGGTACGCCAGAGGCTTCACATATGTGTCTTGTGGATAGGAGACACTTGGC 478  
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 477 TCCATCCAGCTTGAAAGAAC-----AGTCCGACCTGGGGGAGAGGT 430  
 654 hHisAsnLeuThrSerSerThrSerSerMetSerLeuArgProSer----- 670  
 429 GAGAGGTACAGGGCTGATGTTCTTCTTCTGAGAGCAAGCATTCCTCCTAATTGA 370  
 671 -----SerAsnProGluThrLeuSerProSerThrS 681  
 369 CTGCTTGAAGACAGCTATACCTCTCTCTCATCACTGACACCCCTTGACTTCCGAT 310  
 681 exAspAsnSerThrSer-HisMetProLeuLeuThrSerAlaHisPro-----Thr 697  
 309 GGGGATCACTATCTATCAACCTCCAGAGAGGTCTGCCATCTCCCTTGAAGGCTTCT 250  
 698 GlyGlyGlu-----AsnIle-ThrGlnValThrProAlaSerIle----- 710  
 249 CCCACTGGCTCACTCTCCAGGTGCTGCTGTTGTGACCAAGGCCGACACTGGACA 190  
 711 -----SerThrHisH 714  
 189 TGCTCTCAGACATCCACAGCTTACGCGAGTGAACATGAAAGAGGAGCTCCCG 130  
 714 sValSerThrSerSerProGlnProArgProGlyThrThr-----SerGlnAlaSe 731  
 129 TGGTGTAGAGATGCCAGCAGCGGTAGTCTTCTGCG 93  
 731 rGlyProGlyAsnSerSerThrSerThrLyProGly 743

RESULT 13  
 PCT-US95-04611A-19  
 Sequence 19, Application PC/TUS9504611A  
 GENERAL INFORMATION:  
 APPLICANT: Spaete, Richard and Jackman, Winthrop, T.  
 TITLE OF INVENTION: Non Splicing Variants of gp350/220  
 NUMBER OF SEQUENCES: 19  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Cooley Godward Castro Huddleson & Tatum  
 STREET: 5 Palo Alto Square  
 CITY: Palo Alto  
 STATE: California  
 COUNTRY: USA  
 ZIP: 94306  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: PCT/US95/04611A  
 FILING DATE:  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/229,291  
 FILING DATE: April 18, 1994  
 CLASSIFICATION:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Luanm Cseert  
 REGISTRATION NUMBER: 31,822  
 REFERENCE/DOCKET NUMBER: AVIR-003/00US  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 415-843-5163  
 TELEFAX: 415-857-0663  
 TELEX: 380816 CooleyPA  
 INFORMATION FOR SEQ ID NO: 19:











GenCore version 5.1.6  
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OM nucleic - protein search, using frame\_plus\_n2p model

Run on: December 12, 2003, 18:33:56 ; Search time 47.5 Seconds  
(without alignments)  
10939.755 Million cell updates/sec

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Perfect score: 2527  
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Scoring table: BLOSUM62  
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Ygapop 10.0, Ygapext 0.5  
Fgapop 6.0, Fgapext 7.0  
Delop 6.0, Delext 7.0

Searched: 684280 segs, 185983659 residues  
Total number of hits satisfying chosen parameters: 1368560

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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Database : Published Applications\_AA:  
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18: /cg2\_6/ptodata/2/pubppa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the total score distribution, and is derived by analysts of the total score distribution.

## SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|-------------|
|------------|-------|-------------|--------|-------|-------------|

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| 1  | 939   | 37.2 | 175  | 10 | US-09-989-919-84    | Sequence 84, Appl |
| 2  | 283   | 11.1 | 52   | 10 | US-09-989-919-83    | Sequence 83, Appl |
| 3  | 143   | 5.6  | 1426 | 15 | US-10-322-579-15    | Sequence 15, Appl |
| 4  | 134.5 | 5.3  | 738  | 10 | US-09-978-979-6     | Sequence 6, Appl  |
| 5  | 134.5 | 5.3  | 738  | 15 | US-10-057-487-6     | Sequence 5, Appl  |
| 6  | 134   | 5.2  | 4123 | 15 | US-10-213-509-5     | Sequence 5, Appl  |
| 7  | 133.5 | 5.3  | 1150 | 12 | US-10-140-472-531   | Sequence 531, App |
| 8  | 133.5 | 5.3  | 1150 | 12 | US-10-141-761-531   | Sequence 531, App |
| 9  | 133.5 | 5.3  | 1150 | 12 | US-10-142-885-531   | Sequence 531, App |
| 10 | 133.5 | 5.3  | 1150 | 12 | US-10-158-790-531   | Sequence 531, App |
| 11 | 133.5 | 5.3  | 1150 | 12 | US-10-137-871-531   | Sequence 531, App |
| 12 | 133.5 | 5.3  | 1150 | 12 | US-10-140-805-531   | Sequence 531, App |
| 13 | 133.5 | 5.3  | 1150 | 12 | US-10-140-864-531   | Sequence 531, App |
| 14 | 133.5 | 5.3  | 1150 | 12 | US-10-140-923-531   | Sequence 531, App |
| 15 | 133.5 | 5.3  | 1150 | 12 | US-10-141-756-531   | Sequence 531, App |
| 16 | 133.5 | 5.3  | 1150 | 12 | US-10-141-759-531   | Sequence 531, App |
| 17 | 133.5 | 5.3  | 1150 | 15 | US-10-123-155-531   | Sequence 531, App |
| 18 | 133.5 | 5.3  | 1150 | 16 | US-10-146-731-531   | Sequence 531, App |
| 19 | 130.5 | 5.2  | 1346 | 12 | US-10-140-472-481   | Sequence 481, App |
| 20 | 130.5 | 5.2  | 1346 | 12 | US-10-141-761-481   | Sequence 481, App |
| 21 | 130.5 | 5.2  | 1346 | 12 | US-10-142-885-481   | Sequence 481, App |
| 22 | 130.5 | 5.2  | 1346 | 12 | US-10-158-790-481   | Sequence 481, App |
| 23 | 130.5 | 5.2  | 1346 | 12 | US-10-137-871-481   | Sequence 481, App |
| 24 | 130.5 | 5.2  | 1346 | 12 | US-10-140-805-481   | Sequence 481, App |
| 25 | 130.5 | 5.2  | 1346 | 12 | US-10-140-864-481   | Sequence 481, App |
| 26 | 130.5 | 5.2  | 1346 | 12 | US-10-140-923-481   | Sequence 481, App |
| 27 | 130.5 | 5.2  | 1346 | 12 | US-10-141-756-481   | Sequence 481, App |
| 28 | 130.5 | 5.2  | 1346 | 12 | US-10-141-759-481   | Sequence 481, App |
| 29 | 130.5 | 5.2  | 1346 | 15 | US-10-123-155-481   | Sequence 481, App |
| 30 | 130.5 | 5.2  | 1346 | 16 | US-10-146-731-481   | Sequence 481, App |
| 31 | 124.5 | 4.9  | 1280 | 12 | US-10-087-887-86    | Sequence 86, Appl |
| 32 | 122.5 | 4.8  | 647  | 14 | US-10-086-464-2     | Sequence 2, Appl  |
| 33 | 122.5 | 4.8  | 721  | 14 | US-10-086-464-5     | Sequence 4, Appl  |
| 34 | 122.5 | 4.8  | 721  | 14 | US-10-086-464-4     | Sequence 5, Appl  |
| 35 | 121.5 | 4.7  | 522  | 10 | US-09-764-868-1138  | Sequence 1138, Ap |
| 36 | 121.5 | 4.7  | 524  | 10 | US-09-764-868-761   | Sequence 761, Ap  |
| 37 | 121.5 | 4.7  | 1386 | 12 | US-10-327-414-2     | Sequence 2, Appl  |
| 38 | 120.5 | 4.7  | 1336 | 12 | US-10-116-275-207   | Sequence 207, App |
| 39 | 120.5 | 4.7  | 1336 | 15 | US-10-116-847-68    | Sequence 68, Appl |
| 40 | 119.5 | 4.7  | 613  | 12 | US-10-260-937-16    | Sequence 16, Appl |
| 41 | 118   | 4.6  | 897  | 14 | US-10-099-895-1     | Sequence 1, Appl  |
| 42 | 117   | 4.6  | 775  | 12 | US-10-224-999A-3462 | Sequence 3462, Ap |
| 43 | 117   | 4.6  | 2447 | 12 | US-10-140-472-291   | Sequence 291, App |
| 44 | 117   | 4.6  | 2447 | 12 | US-10-141-761-291   | Sequence 291, App |
| 45 | 117   | 4.6  | 2447 | 12 | US-10-142-885-291   | Sequence 291, App |

## ALIGNMENTS

RESULT 1  
US-09-989-919-84  
Sequence 84, Application US/09989919  
Patent No. US2002016434A1  
GENERAL INFORMATION:  
APPLICANT: Macina, Roberto  
APPLICANT: Recipon, Herve  
APPLICANT: Pluta, Jason  
APPLICANT: Ghosh, Malavika  
APPLICANT: Sun, Yongming  
APPLICANT: Liu, Chenghua  
TITLE OF INVENTION: Compositions and Methods Relating to Colon Specific Genes and Pri  
FILE REFERENCE: DEX-0289  
CURRENT APPLICATION NUMBER: US/09/989,919  
CURRENT FILING DATE: 2001-11-21  
PRIOR APPLICATION NUMBER: 60/252,505  
PRIOR FILING DATE: 2000-11-22  
NUMBER OF SEQ ID NOS: 124  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 84  
LENGTH: 175  
TYPE: PRT  
ORGANISM: Homo sapien  
US-09-989-919-84

## Alignment Scores:

Pred. No.: 1,2e-71 Length: 175  
 Score: 939.00 Matches: 175  
 Percent Similarity: 99.43% Conservative: 0  
 Best Local Similarity: 99.43% Mismatches: 0  
 Query Match: 37.16% Indels: 1  
 DB: 10 Gaps: 0

US-09-989-919-15 (1-1397) x US-09-989-919-84 (1-175)

QY 2 GTGCTCACCTGTATCCGGAGCGGAGATATCTGACAACTCCAGCGCAAGCAGTACC 61  
 DB 1 ValLeuHleuYrhtsrglYglntYLeuGlnhserThrAlaserSerThr 20  
 QY 62 GAGTACCACTGTATCCAGACAGCATTCCCGGAGAACTACCGCTGCTGCATCC 121  
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 QY 122 TACACCAAGGAGGCTGCTCTTTCAGTGTACCTGCTGAGGCTGCTGATGCTGT 181  
 DB 41 TyHIShISelYserCysLeuSerValAlphehsmLeuAlaGlnAlaValAspValCys 60  
 QY 182 GAGAGCCATGCCAGTGTCCGGGCTTGTGTGTCACCAACCAACCACTGAGAGGTAG 241  
 DB 61 GluSerHISelagInCysaYrGlaPheValIleThrAmGlnhrTrtYrGlnGlu 80  
 QY 242 CCGTGGGAGAGCCCTTCCAGAGGAGATGGAGACCTCTTGGAGGTGATAGTAT 301  
 DB 81 ProValGlyGlnAlaLeuProArGluMetAlaGlyProLeuYrPaGleuIleApsSer 100  
 QY 302 GATCCCCATCGGAAGTCAGAGGGGGTCTGAGGTGTAGAGAGGTATACGTGCTT 361  
 DB 101 AspProSerGlnValaYrGlyGlyAlaGlnValMetArGlnGlyYrTrCysLeu 120  
 QY 362 CAAGCAGTCAAAATTAGGAGAAATGATCTTCCCTCCAGAAAGAAACATCCAGCCCTGT 421  
 DB 121 GlnGlySerGlnIleArGlnuAmGlyLeuAlaserYrGysArGanIleGlnProCys 140  
 QY 422 TACCTCTACCTCTGCCCCCGAGGTGGAGCTGGTCTTTTCAAGCTGAGTGAAGCA 481  
 DB 141 TyLeuSerProLeu-ProProGlyArGlnLeuValAlpheYerThrGlyYrPserG 160  
 QY 482 AGTGGTCCCTGATCCCAAGACCATATGTGAAGCCCTGGC 527  
 DB 160 nValValProAspProAmuYstrHrTrYrValYsAlaserCyl 175

## RESULT 2

US-09-989-919-83

Sequence 83, Application US/09989919

Patent No. US20020164344A1

GENERAL INFORMATION:

APPLICANT: Macina, Roberto

APPLICANT: Recipon, Hevea

APPLICANT: Pluta, Jason

APPLICANT: Ghosh, Malavika

APPLICANT: Sun, Yongming

APPLICANT: Liu, Chenghua

TITLE OF INVENTION: Compositions and Methods Relating to Colon Specific Genes and Pro

FILE REFERENCE: DEX-0289

CURRENT APPLICATION NUMBER: US/09/989,919

PRIOR FILING DATE: 2001-11-21

PRIOR APPLICATION NUMBER: 60/252,505

PRIOR FILING DATE: 2000-11-22

NUMBER OF SEQ ID NOS: 124

SOFTWARE: PatentIn version 3.1

SEQ ID NO 83

LENGTH: 52

TYPE: PRT

ORGANISM: Homo sapien

US-09-989-919-83

Alignment Scores:

Pred. No.: 1.02e-15 Length: 52  
 Score: 283.00 Matches: 52  
 Percent Similarity: 100.00% Conservative: 0  
 Best Local Similarity: 100.00% Mismatches: 0  
 Query Match: 11.03% Indels: 0  
 DB: 10 Gaps: 0

US-09-989-919-15 (1-1397) x US-09-989-919-83 (1-52)

QY 961 ARGGATGTCGCCAGCAGCCGCCAGCTGCTGAGCATGTGACAGCAGCAGCAG 902  
 DB 1 MetAspCysProHISelAlaIleProThrAlaCysGlyMetCysSerSerSerArG 20  
 QY 901 GCCTTAGCTAATTCTCACTAATTGAACAGATGATGGGCTGCCAGAACCTGCC 842  
 DB 21 GlyPheSerTrYrIleLeuThrIleuLeuAmThrValMetGlyLeuProThrGluProser 40  
 QY 841 CAGGAGGGGCAAGCCCGCAGTGGGAGACTAGCC 806  
 DB 41 GlnGlyGlyAlaGlnProProValGlyArGLeuAla 52

## RESULT 3

US-10-322-579-15

Sequence 15, Application US/10322579

Publication No. US20030114413A1

GENERAL INFORMATION:

APPLICANT: BASLER, Konrad

APPLICANT: BRUNNER, Erich

APPLICANT: FROESCH, Barbara

APPLICANT: KRAMPS, Thomas

APPLICANT: PETER, Oliver

TITLE OF INVENTION: ESSENTIAL DOWNSTREAM COMPONENT OF THE WINGLESS SIGNALING PATHWAY

TITLE OF INVENTION: THERAPEUTIC AND DIAGNOSTIC APPLICATIONS BASED THEREON

FILE REFERENCE: 060361

CURRENT APPLICATION NUMBER: US/10/322,579

CURRENT FILING DATE: 2002-12-19

PRIOR APPLICATION NUMBER: US/09/915,543

PRIOR FILING DATE: 2001-07-27

PRIOR APPLICATION NUMBER: 60/221,502

PRIOR FILING DATE: 2000-07-28

NUMBER OF SEQ ID NOS: 22

SOFTWARE: PatentIn version 3.1

SEQ ID NO 15

LENGTH: 1426

TYPE: PRT

ORGANISM: Human lge/bcl9

US-10-322-579-15

## Alignment Scores:

Pred. No.: 0.00218 Length: 1426  
 Score: 143.00 Matches: 118  
 Percent Similarity: 31.03% Conservative: 39  
 Best Local Similarity: 23.32% Mismatches: 161  
 Query Match: 5.59% Indels: 188  
 DB: 15 Gaps: 24

US-09-989-919-15 (1-1397) x US-10-322-579-15 (1-1426)

QY 1221 GCGTTTCATGAAAGCAAAATGAGCGCAAGCGCCGCCCAACCC----- 1174  
 DB 770 GlyGlnHisProGlnIn-----GluYrGlyMetGlyProArGProPheLeuProMet 787  
 QY 1173 GCCCAGGCTCGGCTCA----- 1156  
 DB 788 SerGlnGlyProGlySerAsnSerGlyLeuArGAsnLeuArGlnuProIleGlyProAsp 807  
 QY 1155 -----AACCAACACTGCTCTCCCTGACCCCAAGCTCTG-----GCTCAT 1120  
 DB 808 GlnArGThrAsnSerArGleuSerHISMetProProLeuProLeuAsnProSerSerAsn 827  
 QY 1119 GCTGAGGTGTGACCTCTGCGCCCTGACCCCTGGGCTGGCTGGAGTGTCCCTGTGCGG 1060  
 DB 828 ProThrSerLeuAsnThrAlaProProValGlnArGlyLeuGlyYrGlyYsProLeuAsp 847





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1 OTHER INFORMATION: unknown amino acid
2 FEATURE:
3 NAME/KEY: MISC_FEATURE
4 LOCATION: (374)..(374)
5 OTHER INFORMATION: unknown amino acid
6 FEATURE:
7 NAME/KEY: MISC_FEATURE
8 LOCATION: (397)..(397)
9 OTHER INFORMATION: unknown amino acid
10 FEATURE:
11 NAME/KEY: MISC_FEATURE
12 LOCATION: (452)..(452)
13 OTHER INFORMATION: unknown amino acid
14 FEATURE:
15 NAME/KEY: MISC_FEATURE
16 LOCATION: (458)..(458)
17 OTHER INFORMATION: unknown amino acid
18 FEATURE:
19 NAME/KEY: MISC_FEATURE
20 LOCATION: (475)..(475)
21 OTHER INFORMATION: unknown amino acid
22 FEATURE:
23 NAME/KEY: MISC_FEATURE
24 LOCATION: (487)..(487)
25 OTHER INFORMATION: unknown amino acid
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Db      491 LeuThrProProThrProProSerThrPArgMetValValSerThrGluTrpProSer 510
|||||
RESULT 6
US-10-213-509-5
; Sequence 5, Application US/10213509
; Publication No. US20030054485A1
; GENERAL INFORMATION:
; APPLICANT: Weiss, Joseph
; APPLICANT: Scott, Matthew
; TITLE OF INVENTION: JELLY BELLY GENES AND THEIR USES
; FILE REFERENCE: STAN-232
; CURRENT APPLICATION NUMBER: US/10/213,509
; CURRENT FILING DATE: 2002-08-06
; PRIOR APPLICATION NUMBER: 60/311,720
; PRIOR FILING DATE: 2001-08-09
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 4123
; TYPE: PR
; ORGANISM: H. sapiens
US-10-213-509-5

Alignment Scores:
Pred. No.: 0.0167 Length: 4123
Score: 134.00 Matches: 110
Percent Similarity: 33.41% Conservative: 36
Best Local Similarity: 25.17% Mismatches: 134
Query Match: 5.23% Indels: 157
DB: 15 Gaps: 26

US-09-989-919-15 (1-1397) x US-10-213-509-5 (1-4123)
QY 1249 GGGGAAGCCTGGTTTGGCTGTGAGGCTTTGATTAAGCAATGAGGAGAAAG 1190
Db 1799 GYGLNALaLeuProSerGlySerLeuValLeuSerLeu-----AspArg 1813
QY 1189 CCCCAGCCCAACCCGCCCCAGAGTCTGTGCTCAACACACACTGCTCCAGCCAGT 1130
Db 1814 ProLALaHisProProProProSer-GlySerAspCytTrpProSerLeuSerGlyLe 1833
QY 1129 CTGGCTCATGCTGAGGTGTGCACCTTGCCCTGACCCCTGGGGCTGGCTGG-----G 1076
Db 1833 u-TrpLeuValLeu---LeuValThrLeuGlyGlnValProGlyProLeuTrpLysProG 1852
QY 1075 AGGTGCTC-----CTGTGGGAGGTGAGAGATAGCTCTCCCAAGTACAGAAATCACCCAC 1022
Db 1852 LHisProValValLeuProGluLeuGlnGlnProProProLeuArgProArgSerProV 1872
QY 1021 ATCTGGAGCATGCCCCGCCCAAGTCTCTGTCCAGACT-----AAG 980
Db 1872 alProTrp-HisProProGlnGlyThrGlnThrLupProGlyGlnGlyHisGln 1891
QY 979 CTGAGAGAACACTCCACAGATGATTTGCCCAAGAGCCCAAGCCCGCTGCTGGCATG 920
Db 1892 GlyGlnValHisArgValGlyGluArgTrpHisGlyGlyPro-----CysArgVal 1908
QY 919 TGCAGCAGCAGCAGCAGGGGCTTTAGCTACTATTCTCACATATTGAACACAGATGAGGG 860
Db 1909 CysGln-CysLeuHisAsnLeuThrAlaHisCysSerProTrp----- 1922
QY 859 CTGCCCCAGGAACCGTCCCAAGGAGGGGACAGCCCCCAAGTGGGGAGACTAGCCTGAGCT 800
Db 1923 -CysPro-----Le 1925
QY 799 TGCTTACAGCCCAAGGGTTGAGAGAGCAGTATACCCCATGATTTCTGGACTAGAGC 740
Db 1925 uGlySerCysProGlnGlyTrp-----ValLeuValGlyGlyThrGlyG 1940
QY 739 CAGCAGTCCCATAGCTAGGCTGGGTGTAATCATATTTAACATTGGGACTTATTCAGACT 680
Db 1940 uSer----- 1941

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|   |      |   |      |
|---|------|---|------|
| QY  | 679  | TCGTCCTGTCACATCTCTCTGTCGGGATGTTATGACTTTGTCGTGAGGGGGTTCCAGAGTGA      | 620  |
| Db  | 1942 | -----CysCysHisCys-----AlaLeuProIleGly                               | 1950 |
| QY  | 619  | CATCAGATGTCGCGCAGTGCAGTCACTCCCT-----CCAGAGGCAAGCCCAAGTGC            | 569  |
| Db  | 1950 | uAenGlnThrValGlnProMetAlaThrProAlaAlaAlaProIaIaProIaSerProGln-I     | 1970 |
| QY  | 568  | TCAGG-----ATATGTCAGCTGTCAGCCGAGCCCTTCAATAGGTTCAGCCAGAGGCTTC         | 515  |
| Db  | 1970 | leaGrpheProLeuAlaThrTyrTlleLeuProProSerGlyGlySerCysArgProLeuS       | 1990 |
| QY  | 514  | AC-----ATATGT-----G   | 506  |
| Db  | 1990 | erSerProThrProAlaCysLeuSerLeuMetHisProIaArProCysTyrSerProLeuG       | 2010 |
| QY  | 505  | GTCCTTGTGGGATCAGGAGC-----CACTTGAGCTCCATCCAGTCTTGAAAAAGACC           | 455  |
| Db  | 2010 | lyLeuAlaGlyLeuAlaGluGlySerLeuMetHisAlaSerSerGlnGlnLeuGlnIleArProT   | 2030 |
| QY  | 454  | AG-----CTGCCGACCTGGGGGCGAGAGTGAAGAGTAAACAGGGCTG                     | 413  |
| Db  | 2030 | hrgAlaAlaAlaLeuLeuGlyAlaProThrGlnGlyProSerProGlnGlyTTrpHisAlaG      | 2050 |
| QY  | 412  | GA-----TGTTCTCTTTCTGGAGAG--CAAGACCAATTCCTCCATAATTGACTGCTGCTG        | 362  |
| Db  | 2050 | lyGlyAaPAlaTyrAlaIaIeTTrpHisIleThrArgProHisIeTyrLeuGlnLeuAspLeuLeuG | 2070 |
| QY  | 361  | AA-----GACACGATACT  | 347  |
| Db  | 2070 | inProArgAaIeUthrGlyLeuLeuValProGlnIleGlySerSerAspAlaTyrAlaAs        | 2090 |
| QY  | 346  | CTCTCTCATCACTCAGACACCCCTCGACTCCGATGGGGGAGTCACTATGATCAACT            | 287  |
| Db  | 2090 | erSerPheSerLeuGlnPheSer-----SerasnGlyLeuHisIleTTrp--HisAspT         | 2106 |
| QY  | 286  | CCAGAGAGTCTCTGCGATCTCCCTTGGAAAGGAGCTTCTCCATGAGTCACTGCTGC-----       | 231  |
| Db  | 2106 | yrArgAspLeuLeuPro-----GlyIleLeuProLeuProIaValSerProA                | 2122 |
| QY  | 230  | -----AGGTGCTCT-----GGTTGTGAC  | 212  |
| Db  | 2122 | IaGlnGlyAyrTrpGlyGlnGlnProThrMetProPheCysGlyPheHisSerLeuCysP        | 2142 |
| QY  | 211  | CACAAAGGCCGACACT-----GGGACATGCTCTTCAC                               | 180  |
| Db  | 2142 | roGlnGlyProSerSerValProGlnGlyHisGlyLeuHis                           | 2155 |
| RESULT 7  |      |   |      |
| US-10-140-472-531   |      |   |      |
| ; Sequence 531, Application US/10140472                                 |      |   |      |
| ; Publication No. US2003013888A1  |      |   |      |
| GENERAL INFORMATION:  |      |   |      |
| APPLICANT: Baker, Kevin P.  |      |   |      |
| APPLICANT: Beresini, Maureen  |      |   |      |
| APPLICANT: DeForge, Laura   |      |   |      |
| APPLICANT: Desnoyers, Luc   |      |   |      |
| APPLICANT: Filvaroff, Ellen   |      |   |      |
| APPLICANT: Gao, Wei-Qiang   |      |   |      |
| APPLICANT: Gerritsen, Mary E.   |      |   |      |
| APPLICANT: Goddard, Audrey  |      |   |      |
| APPLICANT: Godowski, Paul J.  |      |   |      |
| APPLICANT: Gurney, Austin L.  |      |   |      |
| APPLICANT: Sherwood, Steven   |      |   |      |
| APPLICANT: Smith, Victoria  |      |   |      |
| APPLICANT: Stewart, Timothy A.  |      |   |      |
| APPLICANT: Tunas, Daniel  |      |   |      |
| APPLICANT: Watanabe, Colin K  |      |   |      |
| APPLICANT: Wood, William  |      |   |      |
| APPLICANT: Zhang, Zhen  |      |   |      |
| TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC |      |   |      |
| ; TITLE OF INVENTION: ACIDS ENCODING THE SAME                           |      |   |      |



```

; FILE REFERENCE : P3330R.C168
; CURRENT APPLICATION NUMBER: US/10/140,472
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 531
; LENGTH: 1150
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-140-472-531

Alignment Scores:
Pred. NO.:      0.0134      Length:      1150
Score:          133.50     Matches:      80
Percent Similarity: 26.21%   Conservative: 12
Best Local Similarity: 22.79% Mismatches:    79
Query Match:      5.28%     Indels:      180
DB:              12        Gaps:       13

US-09-989-919-15 (1-1397) x US-10-140-472-531 (1-1150)

Oy      3      TGCTGCACCTGT-----ACCGGA      20
Db      |||||
884      CysCysThrCysCysCysThrGlyThrAlaIaIaGlyThrCysThrAlaThrThrThrAla      903
Oy      21      GGCGGCATCATCTGGAGAATCCCAAGGAGAGAGACAAGTACAGAGTAACTCCAG      80
Db      |||:::|||||
904      AlaIaIaIaIaIaCysAlaThrCysGlyAlaCysGlyAlaThrAlaCysAlaThrThrGly      923
Oy      81      ACAGCACCATCCCCCAGAGAGACTACCGCTGTCGCCATCTTACCACGACGAGCTGCC      140
Db      |||:::|||||
924      AlaIaIaIaThrGlyThrGlyThrGlyAlaIaIaCysGlyThrThrThrThrThrGlyAlaIa      943
Oy      141     TCCTTTCACTGTTTCAACCTGGCTGAGGCTGT-----GGATG      176
Db      ::::|:::|:::|
944      AlaIaIaGlyCysThrAlaCysAla-GlyCysThrThrCysCysAlaGlyCysAlaGlyCy      963
Oy      177     TCTGTGAGAGCCATCCAGATGTCGGGGCTTTGTGTCACCAACACGACCACTGGAGAG      236
Db      ||||:::|||||
963      s-CysAlaIaIaIaIaIaGlyCysAlaIaIaCysThrGlyThrThrGlyThrThrThrTrng      983
Oy      237     GTGAGCCAGTGGGAGAACCCCTTCCMAAGGAGATGSCAGAGCACTCTCGAGTTGATAG      296
Db      |||||
983      IyGlyCysAlaIaIaGlyAlaCys-----                990
Oy      297     ATAGTGATCCCCCATCGAAGTCAGAGGGGCTGCTGAGGTGATGAGAGAGATTACTG      356
Db      -----GlyGly|
991      -----                    |                  ThrC      994
Oy      357     GTCTTCAAGGACAGTCAATAATTAGGAGAAATGGCTTTGCTCCAGAAAGAAACATCCAGC      416
Db      ||
994      ys-----                994
Oy      417     CCTGTTAACCTCAACCTCTGCCCCCAGATGGCAGACTGATCTTTTTCAGACTGATAG      476
Db      -----
994      -----                994
Oy      477     AGCCAAATGTGTCCTGATATCCCAACAAGACACATATGTGAAGGCTCTGGCTGACTATC      536
Db      -----CysThrGlyAlaThrGlyThralac      1003
Oy      995      -----
537     TGAGGCTCGGCTGACAGACTGATATCTCAGACAGCTGGG-----CTTGCGCTGTG      587
Db      |||||
1003     ySAlaIaIaGlyCysThrThrGlyAlaThrThrGlyAlaIaIaIaThrThrCysAlaCys-      1022
Oy      588     GAGGAGAGTGACTTG-----ACTGGACACACTGATGTCACTCGGAGACCCCTGCA      638
Db      |||||
1023     ThrGlyCysThrCysAlaCysThrThrGlyAlaThrAlaIaCys-----GlyThrThrAla      1040
Oy      639     GACAAAGTCAATATCCACAGACAGACAGATGTGACAGAGCAAACGTGCAATTAATGCCAAA      698
Db      -----ThrThrCysAlaGlyAla---            1046

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Oy      69  TGTAAATAGTAGTTACCACTGACTAGTGAAGTAAGGACTGGCTTCAGTCCAGGAATCA 758
Db      1046 -----104-----
Oy      759  TGGGGGTATGACTGCCTCTCCAACCCTGTGGCTGTGAACAAGCTCAGTCTGCC 818
Db      1047 -----AlaAaCyScysAlaAaAaglyAlaAa 1058
Oy      819  ACTGGGGCGCTGRCGCCCTCCCTGGAGACGGTTCCGTGGACAGCCCATTACCTGTGTTCAAT 878
Db      1058  ThgIgLgLyCySthrIgLy-----Thr-Cys-----106
Oy      879  AGTGAGAATGATGACTAAAGCCCTGCTGTGC-----TGCTGACATATCCACAGAG 932
Db      1066 -----CyScySaLaAthrCyScySthrCys-Alathrg 1077
Oy      933  GCGGTGGGGCGCTGCTGGGGACA 955
Db      1077  lythrIglYgLyCysThrIglYthr 1084

RESULT 8
US-10-141-761-531
; Sequence 531, Application US/10141761
; Publication No. US20030148432A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Deforge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Thomas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; ACID REFERENCE: P3330R1C198
; CURRENT APPLICATION NUMBER: US/10/141,761
; PRIOR FILING DATE: 2002-05-08
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 531
; LENGTH: 1150
; TYPE: DNA
; ORGANISM: Homo Sapiens
US-10-141-761-531

Alignment Scores:
Pred. No.:          0 0134           Length:         1150
Score:             133.50           Matches:         80
Percent Similarity: 26.21%           Conservative:    12
Best Local Similarity: 22.79%           Mismatches:     79
Query Match:       5.28%              Indels:        180
                               Gaps:            13

US-09-989-919-15 (1-1397) x US-10-141-761-531 (1-1150)
Oy      3  TGCTGACCTGT-----ACCGGA 20
Db      884  CyScySthrCyScySthrIglYthrAlaAaglyThrCystHraAatHrThrAla 903
Oy      21  GGCGGAGATGTCGCGAACCTCCACGCGACAGACGAGACGAGACCGCATACAGTATCCAG 80
Db      904  AlalAlaAlaAlaCySaAthrCySglYalAcySglYalatrAlaAcySaAthrThrgly 923

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QY      81 ACAGACCATCCCCAGAAAGACTACCGCTGCTGGCCATCTTACCAACGAGGAGCTGCC 140
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      |||
Db     924 ALaAlaAlaThrGlyThrGlyThrGlyAlaAlaCysGlyThrThrThrThrAlaAla 943
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      |||
      |||
QY     141 TCCTTCAGTGTCAACCTGCTGAGGCTGT-----GGATG 176
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      |||
Db     944 ALaAlaGlyCysThrAlaCysAla-GlyCysThrThrCysCysAlaGlyCysAlaGlyCys 963
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      |||
      |||
QY     177 TCTGTGAGAGCCATGCCAGTGTGGGCTTTGTGTGCTACCAACGAGGAGCTGAGC 236
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      |||
      |||
Db     963 s-CysAlaAlaAlaAlaAlaGlyCysAlaAlaCysThrGlyThrThrGlyThrThrThr 983
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      |||
      |||
QY     237 GTGAGCCAGTGGAGAAAGCCCTTCCAAAGGAGATGAGGAGACCTCTGTGAGGTGATAG 296
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      |||
      |||
Db     983 lYgIyCysAlaAlaGlyAlaCys----- 990
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      |||
      |||
QY     297 ATATGATCCCCCATGGAAGTCAAGAGGGGTGCTGAGTGTGATGAGAGAGATATACGT 356
      |||
      |||
      |||
Db     991 -----GlyGly-----ThrC 994
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      |||
      |||
QY     357 GTCTTCAAGGACGATCAATTAGGAGATGATGCTTGTCCAGAAAGAAACATCCAGC 416
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      |||
      |||
Db     994 yS----- 994
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      |||
      |||
QY     417 CCTGTACCTCTCACTCTGCCCCCAGGTGGAGCTGTCTTTTCAAGACTGATGG 476
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      |||
      |||
Db     994 ----- 994
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      |||
QY     477 AGCCAAGTGTCCCTGATCCCAACAGACCATATGTGAAGGCTGTGCTGATCCATTC 536
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      |||
Db     995 -----CysThrGlyAlaThrGlyThrAlaC 1003
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      |||
      |||
QY     537 TGAAGGCTCGGCTGACGAGTACTATCTCAGACGCTGGG-----CTTGGCTGTG 587
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      |||
      |||
Db     1003 ySaAlaAlaGlyCysThrThrGlyAlaThrThrGlyAlaAlaAlaThrThrCysAlaCys- 1022
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QY     588 GAGGAGTGACTTGC-----ACTGGAGCATGTCATGTCACTGGGAAACCCCTGCA 638
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Db     1023 ThrGlyCysThrCysAlaCysThrThrGlyAlaThrAlaCys-----GlyThrThrAla 1040
      |||
      |||
      |||
QY     639 GACAAAGCTAACATCCACAGACAGACATGTGACCAAGACAAAGTGCATATATGCCAA 698
      |||
      |||
      |||
Db     1041 -----ThrThrCysAlaGlyAla-- 1046
      |||
      |||
      |||
QY     699 TGTAAATGATGATTACACAGCTAGCTATGGGACTGTGCTGCTCTTAATGTCAGAAATCA 758
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Db     1046 ----- 1046
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      |||
QY     759 TGGGGTATGATGCTCTCCCAACCTGTGGGCTGTAGAGCAAGCTCAGGCTAGTCTCCC 818
      |||
      |||
      |||
Db     1047 -----AlaAlaCysCysCysAlaAlaGlyGlyAlaAla 1057
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      |||
      |||
QY     819 ACTGGGGGCTGTGCCCCCTCCCTGGAGCGTTCCGTGGGAGCCCATCATCTGTTCAT 878
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      |||
      |||
Db     1058 ThrGlyGlyCysThrGly-----ThrCys----- 1065
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      |||
      |||
QY     879 AGTGTGAGATGTAGTAAAGCCCTGTGCTGTC-----TGTGCAATGCCACAGAG 932
      |||
      |||
      |||
Db     1066 -----CysCysCysAlaThrCysCysThrCys-AlaThrG 1077
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      |||
QY     933 GCGGTGGGGCTGCTGGGAGACA 955
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Db     1077 lYThrGlyGlyCysThrGlyThr 1084
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; APPLICANT: Filvaroff, Ellen
; APPLICANT: Geo, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C248
; CURRENT APPLICATION NUMBER: US/10/142,885
; CURRENT FILING DATE: 2002-05-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 531
; LENGTH: 1150
; TYPE: DNA
; ORGANISM: Homo Sapien
; US-10-142-885-531

Alignment Scores:
Pred. No.: 0.0134 Length: 1150
Score: 133.50 Matches: 80
Percent Similarity: 26.218 Conservative: 12
Best Local Similarity: 22.79% Mismatches: 79
Query Match: 5.28% Indels: 180
DB: 12 Gaps: 13

US-09-989-919-15 (1-1397) x US-10-142-885-531 (1-1150)

QY      3 TGTGTGACCTGT-----ACCGGA 20
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      |||
Db     884 CysCysThrCysCysCysThrGlyThrAlaAlaGlyThrCysThrAlaThrThrAlaAla 903
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      |||
      |||
QY     21 GCGGAGATATCTGCGAACTCCAGGCAAGCAGTACCGAGTACCACTGATCCAG 80
      |||
      |||
      |||
Db     904 ALaAlaAlaAlaCysAlaThrCysGlyAlaCysGlyAlaThrAlaCysAlaThrThrGly 923
      |||
      |||
      |||
QY     81 ACAGACCATCCCCAGAAAGACTACCGCTGCTGGCCATCTTACCAACGAGGAGCTGCC 140
      |||
      |||
      |||
Db     924 ALaAlaAlaThrGlyThrGlyThrGlyAlaAlaCysGlyThrThrThrThrAlaAla 943
      |||
      |||
      |||
QY     141 TCCTTCAGTGTCAACCTGCTGAGGCTGT-----GGATG 176
      |||
      |||
      |||
Db     944 ALaAlaGlyCysThrAlaCysAla-GlyCysThrThrCysCysAlaGlyCysAlaGlyCys 963
      |||
      |||
      |||
QY     177 TCTGTGAGAGCCATGCCAGTGTGGGCTTTGTGTGCTACCAACGAGGAGCTGAGC 236
      |||
      |||
      |||
Db     963 s-CysAlaAlaAlaAlaAlaGlyCysAlaAlaCysThrGlyThrThrGlyThrThrThr 983
      |||
      |||
      |||
QY     237 GTGAGCCAGTGGAGAAAGCCCTTCCAAAGGAGATGAGGAGACCTCTGTGAGGTGATAG 296
      |||
      |||
      |||
Db     983 lYgIyCysAlaAlaGlyAlaCys----- 990
      |||
      |||
      |||
QY     297 ATATGATCCCCCATGGAAGTCAAGAGGGGTGCTGAGTGTGATGAGAGAGATATACGT 356
      |||
      |||
      |||
Db     991 -----GlyGly-----ThrC 994
      |||
      |||
      |||
QY     357 GTCTTCAAGGACGATCAATTAGGAGATGATGCTTGTCCAGAAAGAAACATCCAGC 416
      |||
      |||
      |||
Db     994 yS----- 994
      |||
      |||
      |||
QY     417 CCTGTACCTCTCACTCTGCCCCCAGGTGGAGCTGTCTTTTCAAGACTGATGG 476
      |||
      |||
      |||
Db     994 ----- 994
      |||
      |||
      |||
QY     477 AGCCAAGTGTCCCTGATCCCAACAGACCATATGTGAAGGCTGTGCTGATCCATTC 536
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RESULT 9
US-10-142-885-531
; Sequence 531, Application US/10142885
; Publication No. US20030157604A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Deenoysers, Luc

```

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Db      995  -----CysThrGlyAlaThrGlyThraAlaC 1003
QY      537  TGAGGCTCGGCTGACCAAGCTGACTAATCTCAGACGCTGGG-----CTTGCCCTG 587
Db      1003  ysaAlaAlaGlyCysThrThrGlyAlaThrThrGlyAlaAlaAlaThrThrCysAlaCys- 1022
QY      588  GAGGAGTGAAGCTTGC-----ACTGCAGCAGCTGATGTCACCTGGGAACCCCTGCA 638
Db      1023  ThrGlyCysThrCysAlaCysThrThrGlyAlaThrAlaCys-----GlyThrThrAla 1040
QY      639  GACAAAGCTAACATCCACAGACAGATGTGACAGACAAACGTGCAATTAATGCCAA 698
Db      1041  -----ThrThrCysAlaGlyAla----- 1046
QY      699  TGTAAATGTGATTTACACGCTAGCTATGGGACTGCTGCTCTAGTCCAGAAATCA 758
Db      1046  ----- 1046
QY      759  TGGGGGTATGACTGCTCTCCACACCTGTGGGCTGTAAAGCACTGAGCTAGTCTCCC 818
Db      1047  -----AlaAlaCysCysCysAlaAlaAlaGlyGlyAlaAla 1057
QY      819  ACTGGGGCTGTGCCCCCTCCCTGGAGAGGTTCCGTGGGAGCCCACTCACTGTTCAT 878
Db      1058  ThrGlyGlyCysThrGly-----Thr-Cys----- 1065
QY      879  AGGTGAGATGTAGCTAAAGCCCCCTGCTGCTGC-----TGCTGACATGCCACAGCAG 932
Db      1066  -----CysCysCysAlaThrCysCysThrCys-AlaThrG 1077
QY      933  GCGGTGGGGCTGCTGCTGGGAGCA 955
Db      1077  LyThrGlyGlyCysThrGlyThr 1084

RESULT 10
US-10-158-790-531
; Sequence 531, Application US/10158790
; Publication No. US20030180879A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Geriltsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumaes, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C448
; CURRENT APPLICATION NUMBER: US/10/158,790
; CURRENT FILING DATE: 2002-05-30
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 531
; LENGTH: 1150
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-158-790-531

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Alignment Scores: 0.0134 1150  
 Pred. No.: 133.50 Matches: 80  
 Score:

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Percent Similarity: 26.21% Conservative: 12
Best Local Similarity: 22.79% Mismatches: 79
Query Match: 5.28% Indels: 180
DB: 12 Gaps: 13

US-09-989-919-15 (1-1397) x US-10-158-790-531 (1-1150)

QY      3  TCGTCGACCTGT-----ACCGCA 20
Db      884  CysCysThrCysCysCysThrGlyThrAlaAlaGlyThrCysThrAlaThrThrThrAla 903
QY      21  GCGGCGATGTATCGAAGATCCACGGCAGACAGACATACCAATGATCCAGTATCCAG 80
Db      904  AlaAlaAlaAlaCysAlaAlaThrCysGlyAlaCysGlyAlaThrAlaCysAlaThrThrGly 923
QY      81  ACAGACACATCCCCAGAGAACTCCGCTGGCGCATCCATACACACCGGAGGCTGCG 140
Db      924  AlaAlaAlaThrGlyThrGlyThrGlyAlaAlaCysGlyThrThrThrThrThrGlyAlaAla 943
QY      141  TCGTTTCAAGTGTTCACCTGCTGAGGCTGT-----GGATG 176
Db      944  AlaAlaGlyCysThrAlaCysAla-GlyCysThrThrCysCysAlaGlyCysAlaGlyCys 963
QY      177  TCTGTAGAGCCATGCCCCAGTGTCCGGCTTTGTGTGTCACCAACAGACACCTGAGCAG 236
Db      963  s-CysAlaAlaAlaAlaGlyCysAlaAlaCysThrGlyThrThrGlyThrThrThrThrG 983
QY      237  GTGAGCGATGGGAGAAAGCCCTTCCAGGGAATGGCAGGACCTCTGTGAGATTGATG 296
Db      983  LyGlyCysAlaAlaGlyAlaCys----- 990
QY      297  ATAGTATCCCATCGAAGTCAGAGGGGTGTGAGGTGATGAGAGAGATATACGT 356
Db      991  -----GlyGly-----Thrc 994
QY      357  GTCTTCAGAGCAGTCATTAATGAGGAATGTCTGCTCCAGAAAGAGAAATCCACAGC 416
Db      994  ys----- 994
QY      417  CCTGTACTCTACCTCTGCCCCCAGGTCCGACAGTGTCTTTTCAAGACTGATAG 476
Db      994  ----- 994
QY      477  AGCAAGTGTCCCTGATCCCAACAAAGACACATATGTGAGGCGCTGTGCTGACTATTC 536
Db      995  -----CysThrGlyAlaThrGlyThrAlaC 1003
QY      537  TGAGGCTCGGCTGACCAAGCTGACTAATCTCAGACGCTGGG-----CTTGCCCTG 587
Db      1003  ysaAlaAlaGlyCysThrThrGlyAlaThrThrGlyAlaAlaAlaThrThrCysAlaCys- 1022
QY      588  GAGGAGTGAAGCTTGC-----ACTGCAGCAGCTGATGTCACCTGGGAACCCCTGCA 638
Db      1023  ThrGlyCysThrCysAlaCysThrThrGlyAlaThrAlaCys-----GlyThrThrAla 1040
QY      639  GACAAAGCTAACATCCACAGACAGATGTGACAGACAAACGTGCAATTAATGCCAA 698
Db      1041  -----ThrThrCysAlaGlyAla----- 1046
QY      699  TGTAAATGTGATTTACACGCTAGCTATGGGACTGCTGCTCTAGTCCAGAAATCA 758
Db      1046  ----- 1046
QY      759  TGGGGGTATGACTGCTCTCCACACCTGTGGGCTGTAAAGCACTGAGCTAGTCTCCC 818
Db      1047  -----AlaAlaCysCysCysAlaAlaAlaGlyGlyAlaAla 1057
QY      819  ACTGGGGCTGTGCCCCCTCCCTGGAGAGGTTCCGTGGGAGCCCACTCACTGTTCAT 878
Db      1058  ThrGlyGlyCysThrGly-----Thr-Cys----- 1065
QY      879  AGGTGAGATGTAGCTAAAGCCCCCTGCTGCTGC-----TGCTGACATGCCACAGCAG 932

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Db 1066 -----CysCysCysAlaThrCysCysThrCys-AlaThrG 1077  
 QY 933 GCGGTGGGGCTGCTGGGGACA 955  
 Db 1077 LyrThrGlyGlyCysThrGlyThr 1084

## RESULT 11

US-10-137-871-531  
 ; Sequence 531, Application US/10137871  
 ; Publication No. US20030207350A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Baker, Kevin P.  
 ; APPLICANT: Beresini, Maureen  
 ; APPLICANT: DeForge, Laura  
 ; APPLICANT: Desnoyers, Luc  
 ; APPLICANT: Filvaroff, Ellen  
 ; APPLICANT: Gao, Wei-Qiang  
 ; APPLICANT: Geriltsen, Mary E.  
 ; APPLICANT: Goddard, Audrey  
 ; APPLICANT: Godowski, Paul J.  
 ; APPLICANT: Gurney, Austin L.  
 ; APPLICANT: Sherwood, Steven  
 ; APPLICANT: Smith, Victoria  
 ; APPLICANT: Stewart, Timothy A.  
 ; APPLICANT: Tumas, Daniel  
 ; APPLICANT: Matanabe, Colin K  
 ; APPLICANT: Wood, William  
 ; APPLICANT: Zhang, Zemin  
 ; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
 ; FILE REFERENCE: P330R1C153  
 ; CURRENT APPLICATION NUMBER: US/10/137,871  
 ; CURRENT FILING DATE: 2002-05-03  
 ; Prior Application removed - See Palm or File Wrapper  
 ; NUMBER OF SEQ ID NOS: 550  
 ; SEQ ID NO 531  
 ; LENGTH: 1150  
 ; TYPE: DNA  
 ; ORGANISM: Homo Sapien  
 US-10-137-871-531

Alignment Scores:  
 Pred. No.: 0.0134 Length: 1150  
 Score: 133.50 Matches: 80  
 Percent Similarity: 26.21% Conservative: 12  
 Best Local Similarity: 22.79% Mismatches: 79  
 Query Match: 5.28% Indels: 180  
 DB: 12 Gaps: 13

US-09-989-919-15 (1-1397) x US-10-137-871-531 (1-1150)

QY 3 TCCTGCACTCTGT-----ACCGGA 20  
 Db 884 CysCysThrCysCysCysThrGlyThrAlaAlaGlyThrCysThrAlaThrThrThrAla 903  
 QY 21 GCGGGCAGTATCTCGAAGCTCCAGCGGACAGACAGACAGACAGTATCTCCAG 80  
 Db 904 AlaAlaAlaAlaCysAlaThrCysGlyAlaCysGlyAlaThrAlaCysAlaThrThrGly 923  
 QY 81 ACAGACACATCCCCAGAAAGACTACCGCTGCTGCGCATCTTACACACAGGAGCTGCC 140  
 Db 924 AlaAlaAlaThrGlyThrGlyThrGlyAlaAlaCysGlyThrThrThrThrGlyAlaAla 943  
 QY 141 TCCTTACGTGTACCTGCTGAGCTGT-----GGATG 176  
 Db 944 AlaAlaGlyCysThrAlaCysAlaAlaCysThrThrCysCysAlaGlyCysAlaGlyCys 963  
 QY 177 TCTGTAGAGCAGCAGCAGTGTGCGGCTTGTGTACCAACAGACAGCAGTGTGACAG 236  
 Db 963 s-CysAlaAlaAlaAlaGlyCysAlaAlaCysThrGlyThrThrThrThrThrThr 983  
 QY 237 GTGAGCCAGTGGAGAACCTTCCAAAGGAGATGAGGAGACCTCTGTGAGGTTGATAG 296

Db 983 LyrGlyCysAlaAlaGlyAlaCys----- 990  
 QY 297 ATAGTATCCCCATCGAAGTCAAGGGGTGCTGAGGTGATGAGAGAGTATACGT 356  
 Db 991 -----GlyGly-----ThrC 994  
 QY 357 GTCTTCAGAGCAGTCAATTAGGAGAGATGCTTCCCTCCAGAAAGAAACATCCAGC 416  
 Db 994 ys----- 994  
 QY 417 CCTGTACCTTCACCTCTGCCCCCAGGTCCGACAGCTGTCTTTTCAAGACTGATG 476  
 Db 994 ----- 994  
 QY 477 AGCCAGTGTGCTTCATCCCAACAGACATATGTAAGGCTGTGCTGACTATTC 536  
 Db 995 -----CysThrGlyAlaThrGlyThrAlaC 1003  
 QY 537 TGAGGCTGCTGACCAAGCTGATCTCTCAGACAGCTGGG-----CTTGCTGTG 587  
 Db 1003 ysAlaAlaGlyCysThrThrGlyAlaThrThrGlyAlaAlaAlaAlaThrThrCysAlaCys- 1022  
 QY 588 GAGGAGTGACTTGC-----ACTGGAGACTGACATGTCACCTGGAAACCTGGA 638  
 Db 1023 ThrGlyCysThrCysAlaCysThrThrGlyAlaThrAlaCys-----GlyThrThrAla 1040  
 QY 639 GACAAAGCTAATCCACAGACAGACAGATGTGACCAAGCAAACTGCAATATGCCAA 698  
 Db 1041 -----ThrThrCysAlaGlyAla----- 1046  
 QY 699 TGTAAATGTGAGTTTACACAGCTGATGAGGACTGTGCTTACTTCCAGAAATCA 758  
 Db 1046 ----- 1046  
 QY 759 TGGGGTATGATCTGCTCTCCAACTGTGGGTGTAAGCAAGCTGAGCTATCTCCC 818  
 Db 1047 -----AlaAlaCysCysCysAlaAlaGlyAlaAla 1057  
 QY 819 ACTGGGGCTGTGCCCCCTCCCTGGAGCGGTCCGTGGGACGCCCATCTGTGTCAAT 878  
 Db 1058 ThrGlyGlyCysThrGly-----Thr-Cys----- 1065  
 QY 879 AGTGTGAAATGTAGCTAAAGCCCTGCTGCTGC-----TGTGCAATGCAACAGCAG 932  
 Db 1066 -----CysCysCysAlaThrCysCysThrCys-AlaThrG 1077  
 QY 933 GCGGTGGGGCTGCTGGGGACA 955  
 Db 1077 LyrThrGlyGlyCysThrGlyThr 1084

## RESULT 12

US-10-140-805-531  
 ; Sequence 531, Application US/10140805  
 ; Publication No. US20030207417A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Baker, Kevin P.  
 ; APPLICANT: Beresini, Maureen  
 ; APPLICANT: DeForge, Laura  
 ; APPLICANT: Desnoyers, Luc  
 ; APPLICANT: Filvaroff, Ellen  
 ; APPLICANT: Gao, Wei-Qiang  
 ; APPLICANT: Geriltsen, Mary E.  
 ; APPLICANT: Goddard, Audrey  
 ; APPLICANT: Godowski, Paul J.  
 ; APPLICANT: Gurney, Austin L.  
 ; APPLICANT: Sherwood, Steven  
 ; APPLICANT: Smith, Victoria  
 ; APPLICANT: Stewart, Timothy A.  
 ; APPLICANT: Tumas, Daniel  
 ; APPLICANT: Matanabe, Colin K  
 ; APPLICANT: Wood, William  
 ; APPLICANT: Zhang, Zemin  
 ; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

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; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C176
; CURRENT APPLICATION NUMBER: US/10/140,805
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 531
; LENGTH: 1150
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-140-805-531

Alignment Scores:
Pred. No.: 0.0134 Length: 1150
Score: 133.50 Matches: 80
Percent Similarity: 26.21% Conservative: 12
Best Local Similarity: 22.79% Mismatches: 79
Query Match: 5.28% Indels: 180
DB: 12 Gaps: 13

US-09-989-919-15 (1-1397) x US-10-140-805-531 (1-1150)

QY 3 TCGTCACCTGT-----ACCGA 20
DB 884 CysCysThrCysCysCysThrGlyThrAlaAlaGlyThrCysThrAlaThrThrThrAla 903
QY 21 GCGGGCAGTATCTCGAGACTCCAGGAGCAGAGCAGTACCGAGTACCGAGTATCCAG 80
DB 904 AlaAlaAlaAlaCysAlaThrCysGlyAlaCysGlyAlaThrAlaCysAlaThrThrGly 923
QY 81 ACAGCACCATCCCGCCAGAACTACCGCTGCTGCCATCTTACCAACAGGAGCTGCC 140
DB 924 AlaAlaAlaThrGlyThrGlyThrGlyThrAlaAlaCysGlyThrThrThrThrGlyAla 943
QY 141 TCGTTTCAGTGTCAACCTGGCTGAGCTGT-----GGATG 176
DB 944 AlaAlaGlyCysThrAlaCysAla-glyCysThrThrCysCysAlaGlyCysAlaGlyCys 963
QY 177 TCGTGAGAGCAGTCCGCGAGTGGGCTTTGTGTCCACCAACAGCAGCAGCTGGACAG 236
DB 963 s-CysAlaAlaAlaAlaGlyCysAlaAlaCysThrGlyThrThrGlyThrThrThrThg 983
QY 237 GTGAGCAGTGGAGAGACCTTCCCAAGGAGATGAGAGCAGTCTCTGAGAGTTGATAG 296
DB 983 IyGlyCysAlaAlaGlyAlaCys----- 990
QY 297 ATAGTATCCCCCATCGAAGTCAAGGGGGTGTGATGATGAGAGAGATATACGT 356
DB 991 -----GlyGly-----ThrC 994
QY 357 GTCTTCAAGGACGTCAATTTAGGAGAAATGCTTTCCTCCAGAAAGAAACATCCAGC 416
DB 994 ys----- 994
QY 417 CCTGTACCTTCACCTCTGCCCCCAGTGGCAGCTGGTCTTTTCAAGACTGATGAG 476
DB 994 ----- 994
QY 477 AGCGAAGTGTCTTCATCCCAACCAACCATATGTGAGGCTCTGCTGAGCCTATTC 536
DB 995 -----CysThrGlyAlaThrGlyThrAlaC 1003
QY 537 TGAGGGCTGGGCTGACGACTATCTCTCAGACACTGGG-----CTTGCTGTGG 587
DB 1003 ysAlaAlaGlyCysThrThrGlyAlaThrThrGlyAlaAlaAlaThrThrCysAlaCys- 1022
QY 588 GAGGAGTACTTGC-----ACTGGCAGCAGTCAATGTCACTGGGAAACCTCTGA 638
DB 1023 ThrGlyCysThrCysAlaCysThrThrGlyAlaThrAlaCys-----GlyThrThrAla 1040
QY 639 GACAAAGCTAAACATCCACAGACAGACAGATGTGACAGCAACAAAGTCATATATGCCAA 698
DB 1041 -----ThrThrCysAlaGlyAla----- 1046

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QY 699 TGTAAATGTGAGTTTACACAGCTAGCTATGAGACTGTGCTCTCTAGTCCAGAAATCA 758
DB 1046 ----- 1046
QY 759 TGGGGGTATAGTACTGCTCTCCACACCTGTGGGCTGTAAAGCAGCTCAGCTAGTCTCCC 818
DB 1047 -----AlaAlaCysCysCysAlaAlaGlyAlaAla 1057
QY 819 ACTGGGGGCTGNGCCCTCCCTGAGAGCGTTCCGGGAGGCCCATCATCAGTGTTCAT 878
DB 1058 ThrGlyGlyCysThrGly-----Thr-Cys----- 1065
QY 879 AGTGAGAGATAGTAAAGCCCTGCTGTGC-----TCTGACATGCCACAGCAG 932
DB 1066 -----CysCysCysAlaThrCysCysThrCys-AlaThrG 1077
QY 933 GCGGTGGGGGCTGCGTGGGAGCA 955
DB 1077 IyThrGlyGlyCysThrGlyThr 1084

RESULT 13
US-10-140-864-531
; Sequence 531, Application US/10140864
; Publication No. US20030207419A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Deforge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gueney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zeman
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C184
; CURRENT APPLICATION NUMBER: US/10/140,864
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 531
; LENGTH: 1150
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-140-864-531

Alignment Scores:
Pred. No.: 0.0134 Length: 1150
Score: 133.50 Matches: 80
Percent Similarity: 26.21% Conservative: 12
Best Local Similarity: 22.79% Mismatches: 79
Query Match: 5.28% Indels: 180
DB: 12 Gaps: 13

US-09-989-919-15 (1-1397) x US-10-140-864-531 (1-1150)

QY 3 TCGTCACCTGT-----ACCGA 20
DB 884 CysCysThrCysCysCysThrGlyThrAlaAlaGlyThrCysThrAlaThrThrThrAla 903
QY 21 GCGGGCAGTATCTCGAGACTCCAGGAGCAGAGCAGTACCGAGTATCCAG 80
DB 904 AlaAlaAlaAlaCysAlaThrCysGlyAlaCysGlyAlaThrAlaCysAlaThrThrGly 923

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|    |      |                         |                                      |      |
|----|------|-------------------------|--------------------------------------|------|
| Db | 1066 | -----                   |                                      |      |
|    |      |                         | -CysCysCysAlaThrCysCysThrCys-AlaThrG | 1077 |
| Qy | 933  | GGGATGGGGGCTGCGTGGGACA  | 955                                  |      |
|    |      |                         |                                      |      |
| Db | 1077 | lyThrGlyGlyCysThrGlyThr | 1084                                 |      |

Search completed: December 12, 2003, 18:46:13  
Job time : 72.5 secs



GenCore version 5.1.6  
Copyright (c) 1993 - 2003 Comugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: December 13, 2003, 18:11:58 ; Search time 80 Seconds  
(without alignments)  
7707.653 Million cell updates/sec

Title: US-09-989-919-15

Perfect score: 1397  
Sequence: 1 ggtgctgcacccgtaccgga.....aaaaaaaaaaagcgcgtc 1397

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 1.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%  
Listing first 45 summaries

Database :

Issued\_Patents\_NA:\*  
1: /cgn2\_6/ptodata/2/ina/5A COMB.seq:\*  
2: /cgn2\_6/ptodata/2/ina/5B COMB.seq:\*  
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6: /cgn2\_6/ptodata/2/ina/backfile1.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description                         |
|------------|-------|-------------|--------|----|-------------------------------------|
| 1          | 46    | 3.3         | 2773   | 4  | US-09-996-243-178 Sequence 178, App |
| 2          | 44.6  | 3.2         | 1037   | 4  | US-09-489-847-112 Sequence 112, App |
| 3          | 44.6  | 3.2         | 1342   | 4  | US-09-489-847-89 Sequence 89, App   |
| 4          | 44    | 3.1         | 1037   | 4  | US-09-489-847-112 Sequence 112, App |
| 5          | 43.2  | 3.1         | 2223   | 1  | US-08-257-073-4 Sequence 4, App     |
| 6          | 43    | 3.1         | 441    | 4  | US-09-601-537-10 Sequence 10, App   |
| 7          | 43    | 3.1         | 944    | 3  | US-08-906-769-82 Sequence 82, App   |
| 8          | 43    | 3.1         | 944    | 3  | US-08-906-616-82 Sequence 82, App   |
| 9          | 43    | 3.1         | 944    | 3  | US-08-817-795-82 Sequence 82, App   |
| 10         | 43    | 3.1         | 944    | 3  | US-09-012-431-82 Sequence 82, App   |
| 11         | 43    | 3.1         | 944    | 3  | US-09-012-692-82 Sequence 82, App   |
| 12         | 43    | 3.1         | 944    | 3  | US-08-906-613-82 Sequence 82, App   |
| 13         | 43    | 3.1         | 944    | 3  | US-08-906-613-82 Sequence 82, App   |
| 14         | 43    | 3.1         | 944    | 5  | PCT-US95-14442A-82 Sequence 26, App |
| 15         | 43    | 3.1         | 945    | 3  | US-09-032-215-26 Sequence 26, App   |
| 16         | 43    | 3.1         | 1582   | 3  | US-09-032-215-28 Sequence 28, App   |
| 17         | 43    | 3.1         | 1582   | 3  | US-08-545-196B-10 Sequence 10, App  |
| 18         | 43    | 3.1         | 1582   | 3  | US-08-545-196B-12 Sequence 12, App  |
| 19         | 43    | 3.1         | 4121   | 4  | US-09-601-537-9 Sequence 9, App     |
| 20         | 42.8  | 3.1         | 1052   | 4  | US-09-489-847-23 Sequence 23, App   |
| 21         | 42.6  | 3.0         | 1361   | 4  | US-09-489-847-23 Sequence 23, App   |
| 22         | 42.6  | 3.0         | 1492   | 4  | US-09-369-247-23 Sequence 23, App   |
| 23         | 42.6  | 3.0         | 5852   | 1  | US-08-232-463-14 Sequence 14, App   |
| 24         | 42    | 3.0         | 7218   | 1  | US-07-867-106-2 Sequence 2, App     |
| 25         | 41.8  | 3.0         | 4203   | 2  | US-08-866-757-1 Sequence 1, App     |
| 26         | 41.8  | 3.0         | 4203   | 3  | US-09-153-593-1 Sequence 1, App     |
| 27         | 41.4  | 3.0         | 731    | 4  | US-09-288-143-38 Sequence 38, App   |

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| 28 | 41.4 | 3.0 | 2136  | 4 | US-09-996-243-302 Sequence 302, App |
| 29 | 41.4 | 3.0 | 3715  | 4 | US-09-234-245-1 Sequence 1, App     |
| 30 | 41.4 | 3.0 | 6152  | 3 | US-08-973-462-1 Sequence 1, App     |
| 31 | 41.4 | 3.0 | 37950 | 3 | US-09-338-907-183 Sequence 183, App |
| 32 | 41.4 | 3.0 | 37950 | 4 | US-09-218-207-183 Sequence 183, App |
| 33 | 41.2 | 2.9 | 2434  | 4 | US-09-489-847-67 Sequence 67, App   |
| 34 | 40.8 | 2.9 | 198   | 1 | US-08-330-108-16 Sequence 16, App   |
| 35 | 40.8 | 2.9 | 949   | 5 | PCT-US92-10087-16 Sequence 16, App  |
| 36 | 40.8 | 2.9 | 144   | 1 | US-08-702-344-26 Sequence 26, App   |
| 37 | 40.4 | 2.9 | 1474  | 3 | US-08-821-994-64 Sequence 64, App   |
| 38 | 40.4 | 2.9 | 3138  | 1 | US-07-867-106-4 Sequence 4, App     |
| 39 | 40.4 | 2.9 | 1683  | 3 | US-09-347-803-11 Sequence 11, App   |
| 40 | 40   | 2.9 | 2447  | 2 | US-09-014-969-14 Sequence 14, App   |
| 41 | 39.8 | 2.8 | 1129  | 4 | US-09-227-357-40 Sequence 40, App   |
| 42 | 39.8 | 2.8 | 3989  | 4 | US-09-205-258-28 Sequence 28, App   |
| 43 | 39.6 | 2.8 | 1114  | 4 | US-09-152-060-41 Sequence 41, App   |
| 44 | 39.6 | 2.8 | 2013  | 4 | US-09-596-196-3 Sequence 3, App     |
| 45 | 39.6 | 2.8 | 2013  | 4 | US-09-596-196-3 Sequence 3, App     |

#### ALIGNMENTS

RESULT 1  
US-09-996-243-178  
Sequence 178, Application US/09996243  
Patent No. 6478825  
GENERAL INFORMATION:  
APPLICANT: Ashkenazi, Avi J.  
APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Desnovers, Luc  
APPLICANT: Baton, Dan L.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gerber, Hanspeter  
APPLICANT: Gerlitsen, Mary E.  
APPLICANT: Goddard, Audrey  
APPLICANT: Godowski, Paul J.  
APPLICANT: Grimaldi, J. Christopher  
APPLICANT: Gurney, Austin L.  
APPLICANT: Kljavin, Ivar J.  
APPLICANT: Napier, Mary A.  
APPLICANT: Pan, James  
APPLICANT: Paoni, Nicholas F.  
APPLICANT: Roy, Margaret Ann  
APPLICANT: Stewart, Timothy A.  
APPLICANT: Tumas, Daniel  
APPLICANT: Watanabe, Colin K.  
APPLICANT: Williams, P. Mickey  
APPLICANT: Wood, William I.  
APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
FILE REFERENCE: P2730P1C13  
CURRENT APPLICATION NUMBER: US/09/996,243  
CURRENT FILING DATE: 2001-11-14  
PRIOR APPLICATION NUMBER: 60/049787  
PRIOR FILING DATE: 1997-06-16  
PRIOR APPLICATION NUMBER: 60/062250  
PRIOR FILING DATE: 1997-10-17  
PRIOR APPLICATION NUMBER: 60/065186  
PRIOR FILING DATE: 1997-11-12  
PRIOR APPLICATION NUMBER: 60/065311  
PRIOR FILING DATE: 1997-11-13  
PRIOR APPLICATION NUMBER: 60/066770  
PRIOR FILING DATE: 1997-11-24  
PRIOR APPLICATION NUMBER: 60/075945  
PRIOR FILING DATE: 1998-02-25  
PRIOR APPLICATION NUMBER: 60/078910  
PRIOR FILING DATE: 1998-03-20  
PRIOR APPLICATION NUMBER: 60/083322  
PRIOR FILING DATE: 1998-04-28



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; EARLIER FILING DATE: 1998-08-12
; EARLIER APPLICATION NUMBER: 60/095,454
; EARLIER FILING DATE: 1998-08-06

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COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/257,073  
FILING DATE: 09-JUN-1994  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/075,783  
FILING DATE: 11-JUN-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/852,305  
FILING DATE: 18-MAR-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/672,183  
FILING DATE: 20-MAR-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Frommer, William S.  
REGISTRATION NUMBER: 25,506

1336 AATAAATGATGTTTCACAGCAAACTCTTCCCTAAAAA  
 1380  
 356 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA  
 410



APPLICANT: Frank, Glenn R.  
APPLICANT: Heach, Andrew W.  
APPLICANT: Yamaka, Miles Yamataka  
APPLICANT: Arfeten, Ann  
APPLICANT: Dale, Beverly  
APPLICANT: Stiegler, Gary  
TITLE OF INVENTION: USE OF PROTEASE INHIBITORS AND  
TITLE OF INVENTION: PROTEASE VACCINES TO PROTECT ANIMALS FROM FLEA  
TITLE OF INVENTION: INFESTATION, AND FLEA PROTEASE PROTEINS, NUCLEIC ACID  
TITLE OF INVENTION: MOLECULES, AND USES THEREOF  
NUMBER OF SEQUENCES: 119  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sheridan Ross & McIntosh  
STREET: 1700 Lincoln Street, Suite 3500  
CITY: Denver  
STATE: Colorado  
COUNTRY: USA  
ZIP: 80203  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/817,795  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/14442  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Gary J. Connell  
REGISTRATION NUMBER: 32,020  
REFERENCE/DOCKET NUMBER:  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (303) 863-9700  
TELEFAX: (303) 863-0223  
INFORMATION FOR SEQ ID NO: 82:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 944 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 3..768  
US-08-817-795-82  
Query Match  
Best Local Similarity 3.1%; Score 43; DB 3; Length 944;  
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;  
QY 1260 TTGAATATCCAGATCTTTGTACTCTTGTTGTTAAATGTTATTTTGTAAAAA 1319  
DB 814 TTTAGTATATATAATCTTTGTGATTCATGCAATATTTTGTATTTATTTTAC 873  
QY 1320 TAAATATAATTAGTTAATAAATGATGTTTCACAGCAACTCTCCCTAAAAA 1379  
DB 874 TTTATCAACGAATGATTAAGTAAATTAACAATAAAAGTTAGTGCCAAAAA 933  
QY 1380 AAAAAAAAAA 1390  
DB 934 AAAAAAAAAA 944  
RESULT 10  
US-08-639-075A-82  
Sequence 82, Application US/08639075A  
Patent No. 6150125  
GENERAL INFORMATION:  
APPLICANT: Grieve, Robert B.  
APPLICANT: Rushlow, Keith E.

APPLICANT: Mu Hunter, Shirley  
APPLICANT: Frank, Glenn R.  
APPLICANT: Stiegler, Gary  
APPLICANT: Gaines, Patrick J.  
APPLICANT: Silver, Gary  
TITLE OF INVENTION: FLEA PROTEASE PROTEINS, NUCLEIC ACID  
TITLE OF INVENTION: MOLECULES AND USES THEREOF  
NUMBER OF SEQUENCES: 190  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sheridan Ross & McIntosh  
STREET: 1700 Lincoln Street, Suite 3500  
CITY: Denver  
STATE: Colorado  
COUNTRY: USA  
ZIP: 80203  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/639,075A  
FILING DATE: 24-APR-1996  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: Connell, Gary J.  
REGISTRATION NUMBER: 32,020  
REFERENCE/DOCKET NUMBER: 2618-25-C2  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (303) 863-9700  
TELEFAX: (303) 863-0223  
INFORMATION FOR SEQ ID NO: 82:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 944 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 3..768  
US-08-639-075A-82  
Query Match  
Best Local Similarity 3.1%; Score 43; DB 3; Length 944;  
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;  
QY 1260 TTGAATATCCAGATCTTTGTACTCTTGTTGTTAAATGTTATTTTGTAAAAA 1319  
DB 814 TTTAGTATATATAATCTTTGTGATTCATGCAATATTTTGTATTTATTTTAC 873  
QY 1320 TAAATATAATTAGTTAATAAATGATGTTTCACAGCAACTCTCCCTAAAAA 1379  
DB 874 TTTATCAACGAATGATTAAGTAAATTAACAATAAAAGTTAGTGCCAAAAA 933  
QY 1380 AAAAAAAAAA 1390  
DB 934 AAAAAAAAAA 944  
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US-09-012-431-82  
Sequence 82, Application US/09012431  
Patent No. 6180383  
GENERAL INFORMATION:  
APPLICANT: Grieve, Robert B.  
APPLICANT: Rushlow, Keith E.  
APPLICANT: Mu Hunter, Shirley  
APPLICANT: Frank, Glenn R.  
APPLICANT: Stiegler, Gary  
APPLICANT: Gaines, Patrick J.  
APPLICANT: Silver, Gary  
TITLE OF INVENTION: FLEA PROTEASE PROTEINS, NUCLEIC ACID



CITY: Denver  
STATE: Colorado  
COUNTRY: USA  
ZIP: 80203  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/906,613  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/639,075  
FILING DATE: 24-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Connell, Gary J.  
REGISTRATION NUMBER: 32,020  
REFERENCE/DOCKET NUMBER: 2618-25-C2  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (303) 863-9700  
TELEFAX: (303) 863-0223  
INFORMATION FOR SEQ ID NO: 82:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 944 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 3..768  
US-08-906-613-82

Query Match 3.1%; Score 43; DB 3; Length 944;  
Best Local Similarity 58.0%; Pred. No. 0.04;  
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

QY 1260 TTGAATATCCAGATCTTTTGACTCTTGTTGTTAAATGTTATTTTGTAAAAA 1319  
DB 814 TTATGATATATAATCCCTTGATTCAGCAAAATTTGTTTATTTATTTTAC 873  
QY 1320 TAAATATAATTTGTTATATAATGATGTTTCACAGCAAACTCTTCCCTAAAAA 1379  
DB 874 TTTATTCAGATGATGATTAAGTGAATTAACAATAAAATGTTAGTCCCAAAAAA 933  
QY 1380 AAAAAAAAAA 1390  
DB 934 AAAAAAAAAA 944

RESULT 14  
PCT-US95-14442A-82  
Sequence 82, Application .PC/TUS9514442A  
GENERAL INFORMATION:  
APPLICANT: Grieve, Robert B.  
APPLICANT: Rushlow, Keith E.  
APPLICANT: Hunter, Shirley Wu  
APPLICANT: Frank, Glenn R.  
APPLICANT: Heath, Andrew W.  
APPLICANT: Yamaka, Miles Yamanaka  
APPLICANT: Arfsten, Ann  
APPLICANT: Dale, Beverly  
APPLICANT: Stiegler, Gary  
TITLE OF INVENTION: USE OF PROTEASE INHIBITORS AND  
TITLE OF INVENTION: PROTEASE VACCINES TO PROTECT ANIMALS FROM FLEA  
TITLE OF INVENTION: INSESTATION, AND FLEA PROTEASE PROTEINS, NUCLEIC ACID  
TITLE OF INVENTION: MOLECULES, AND USES THEREOF  
NUMBER OF SEQUENCES: 119  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Sheridan Rose & McIntosh  
STREET: 1700 Lincoln Street, Suite 3500

CITY: Denver  
STATE: Colorado  
COUNTRY: USA  
ZIP: 80203  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/14442A  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Gary J. Connell  
REGISTRATION NUMBER: 32,020  
REFERENCE/DOCKET NUMBER:  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (303) 863-9700  
TELEFAX: (303) 863-0223  
INFORMATION FOR SEQ ID NO: 82:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 944 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 3..768  
PCT-US95-14442A-82

Query Match 3.1%; Score 43; DB 5; Length 944;  
Best Local Similarity 58.0%; Pred. No. 0.04;  
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

QY 1260 TTGAATATCCAGATCTTTTGACTCTTGTTGTTAAATGTTATTTTGTAAAAA 1319  
DB 814 TTATGATATATAATCCCTTGATTCAGCAAAATTTGTTTATTTATTTTAC 873  
QY 1320 TAAATATAATTTGTTATATAATGATGTTTCACAGCAAACTCTTCCCTAAAAA 1379  
DB 874 TTTATTCAGATGATGATTAAGTGAATTAACAATAAAATGTTAGTCCCAAAAAA 933  
QY 1380 AAAAAAAAAA 1390  
DB 934 AAAAAAAAAA 944

RESULT 15  
US-09-032-215-26  
Sequence 26, Application US/09032215  
Patent No. 6204010  
GENERAL INFORMATION:  
APPLICANT: Stiegler, Gary L.  
APPLICANT: Gaines, Patrick J.  
TITLE OF INVENTION: FLEA PROTEASE PROTEINS, NUCLEIC  
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF  
NUMBER OF SEQUENCES: 50  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Sheridan Rose P.C.  
STREET: 1700 Lincoln Street, Suite 3500  
CITY: Denver  
STATE: Colorado  
COUNTRY: U.S.A.  
ZIP: 80203  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: ASCII DOS TEXT  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/032,215







GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

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(without alignments)  
12965.464 Million cell updates/sec

Title: US-09-989-919-15

Perfect score: 1397

Sequence: 1 ggtgctgacactgtaccgga.....aaaaaaaaaagcgctc 1397

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 1.0

Searched: 2201672 seqs, 1661799599 residues

Total number of hits satisfying chosen parameters: 4403344

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

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Database :

Published Applications NA:\*

- 1: /cgn2\_6/ptodata/1/pubpna/US07\_PUBCOMB.seq:\*
- 2: /cgn2\_6/ptodata/1/pubpna/PCT\_NEW\_PUB.seq:\*
- 3: /cgn2\_6/ptodata/1/pubpna/US06\_NEW\_PUB.seq:\*
- 4: /cgn2\_6/ptodata/1/pubpna/US06\_PUBCOMB.seq:\*
- 5: /cgn2\_6/ptodata/1/pubpna/US07\_NEW\_PUB.seq:\*
- 6: /cgn2\_6/ptodata/1/pubpna/PCTUS\_PUBCOMB.seq:\*
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- 10: /cgn2\_6/ptodata/1/pubpna/US09B\_PUBCOMB.seq:\*
- 11: /cgn2\_6/ptodata/1/pubpna/US09C\_PUBCOMB.seq:\*
- 12: /cgn2\_6/ptodata/1/pubpna/US09C\_NEW\_PUB.seq:\*
- 13: /cgn2\_6/ptodata/1/pubpna/US09\_NEW\_PUB.seq:\*
- 14: /cgn2\_6/ptodata/1/pubpna/US10\_PUBCOMB.seq:\*
- 15: /cgn2\_6/ptodata/1/pubpna/US10B\_PUBCOMB.seq:\*
- 16: /cgn2\_6/ptodata/1/pubpna/US10\_NEW\_PUB.seq:\*
- 17: /cgn2\_6/ptodata/1/pubpna/US60\_NEW\_PUB.seq:\*
- 18: /cgn2\_6/ptodata/1/pubpna/US60\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description         |
|------------|-------|-------------|--------|----|---------------------|
| 1          | 1397  | 100.0       | 1397   | 10 | US-09-989-919-15    |
| 2          | 940.4 | 67.3        | 1714   | 13 | US-10-006-285-474   |
| 3          | 464.2 | 33.2        | 470    | 10 | US-09-989-919-14    |
| 4          | 420.8 | 30.1        | 427    | 10 | US-09-880-107-1138  |
| 5          | 164   | 11.7        | 1358   | 11 | US-10-006-285-304   |
| 6          | 97    | 6.9         | 493    | 11 | US-09-918-995-32213 |
| 7          | 72.2  | 5.2         | 250    | 13 | US-10-006-285-33    |
| 8          | 55.2  | 4.0         | 428    | 10 | US-09-960-352-10180 |
| 9          | 53.8  | 3.9         | 664    | 13 | US-09-814-353-4739  |
| 10         | 53.8  | 3.9         | 664    | 13 | US-09-814-353-11036 |
| 11         | 53.6  | 3.8         | 476    | 13 | US-09-814-353-17420 |
| 12         | 52.4  | 3.8         | 383    | 13 | US-09-814-353-18006 |
| 13         | 51    | 3.7         | 375    | 10 | US-09-960-352-15014 |
| 14         | 50.6  | 3.6         | 425    | 10 | US-09-834-975-451   |
| 15         | 50.6  | 3.6         | 16688  | 13 | US-10-311-455-293   |

|      |      |     |      |    |                     |                   |
|------|------|-----|------|----|---------------------|-------------------|
| C 16 | 50.4 | 3.6 | 317  | 13 | US-10-125-968-1260  | Sequence 1260, Ap |
| C 17 | 50.4 | 3.6 | 383  | 13 | US-09-814-353-18006 | Sequence 18006, A |
| C 18 | 50.2 | 3.6 | 302  | 13 | US-09-814-353-5335  | Sequence 5335, Ap |
| C 19 | 50.2 | 3.6 | 302  | 13 | US-09-814-353-11622 | Sequence 11622, A |
| C 20 | 50   | 3.6 | 461  | 13 | US-09-814-353-17779 | Sequence 17779, A |
| C 21 | 49.4 | 3.5 | 312  | 10 | US-09-960-352-8414  | Sequence 8414, Ap |
| C 22 | 49   | 3.5 | 361  | 15 | US-10-198-846-8619  | Sequence 8619, Ap |
| C 23 | 48.8 | 3.5 | 375  | 10 | US-09-960-352-15014 | Sequence 15014, A |
| C 24 | 48.8 | 3.5 | 424  | 10 | US-09-960-352-11218 | Sequence 11218, A |
| C 25 | 48.6 | 3.5 | 766  | 9  | US-09-910-943-714   | Sequence 714, App |
| C 26 | 48.4 | 3.5 | 298  | 10 | US-09-960-352-1004  | Sequence 1004, Ap |
| C 27 | 48.2 | 3.5 | 348  | 13 | US-09-814-353-5612  | Sequence 5612, Ap |
| C 28 | 48.2 | 3.5 | 348  | 13 | US-09-814-353-11899 | Sequence 11899, A |
| C 29 | 48.2 | 3.5 | 436  | 10 | US-09-834-975-533   | Sequence 533, App |
| C 30 | 48.2 | 3.5 | 1885 | 13 | US-09-814-353-19371 | Sequence 19371, A |
| C 31 | 48.2 | 3.5 | 8260 | 13 | US-10-240-453-215   | Sequence 215, App |
| C 32 | 48   | 3.4 | 424  | 15 | US-10-198-846-2929  | Sequence 2929, Ap |
| C 33 | 48   | 3.4 | 530  | 13 | US-09-814-353-5294  | Sequence 5294, Ap |
| C 34 | 48   | 3.4 | 530  | 13 | US-09-814-353-11581 | Sequence 11581, A |
| C 35 | 47.8 | 3.4 | 277  | 10 | US-09-960-352-12673 | Sequence 12673, A |
| C 36 | 47.8 | 3.4 | 312  | 10 | US-09-960-352-8414  | Sequence 8414, Ap |
| C 37 | 47.6 | 3.4 | 435  | 13 | US-09-814-353-5103  | Sequence 5103, Ap |
| C 38 | 47.6 | 3.4 | 435  | 13 | US-09-814-353-11395 | Sequence 11395, A |
| C 39 | 47.2 | 3.4 | 403  | 10 | US-09-960-352-3319  | Sequence 3319, Ap |
| C 40 | 47   | 3.4 | 638  | 15 | US-10-198-846-8560  | Sequence 8560, Ap |
| C 41 | 46.8 | 3.4 | 600  | 15 | US-10-198-846-8434  | Sequence 8434, Ap |
| C 42 | 46.8 | 3.4 | 1767 | 14 | US-10-001-843-1     | Sequence 1, Appl  |
| C 43 | 46.6 | 3.3 | 416  | 10 | US-09-960-352-4584  | Sequence 4584, Ap |
| C 44 | 46.4 | 3.3 | 346  | 13 | US-09-814-353-17676 | Sequence 17676, A |
| C 45 | 46.2 | 3.3 | 418  | 10 | US-09-960-352-4845  | Sequence 4845, Ap |

#### ALIGNMENTS

RESULT 1  
US-09-989-919-15  
; Sequence 15, Application US/09989919  
; Patent No. US20020164344A1  
; GENERAL INFORMATION:  
; APPLICANT: Macina, Roberto  
; APPLICANT: Recipon, Hervé  
; APPLICANT: Pluta, Jason  
; APPLICANT: Ghosh, Malavika  
; APPLICANT: Sun, Yongming  
; APPLICANT: Liu, Chenghua  
; TITLE OF INVENTION: Compositions and Methods Relating to Colon Specific Genes and Pr  
; FILE REFERENCE: DEX-0289  
; CURRENT FILING DATE: 2001-11-21  
; PRIOR APPLICATION NUMBER: 60/252,505  
; PRIOR FILING DATE: 2000-11-22  
; NUMBER OF SEQ ID NOS: 124  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 15  
; LENGTH: 1397  
; TYPE: DNA  
; ORGANISM: Homo sapien  
; US-09-989-919-15

Query Match 100.0%; Score 1397; DB 10; Length 1397;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 1397; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGTGCTGACACTGTATCCGAGCGGAGATGTGCAAGACTCCAGCGGACAGCAGTAC 60  
DB 1 GGTGCTGACACTGTATCCGAGCGGAGATGTGCAAGACTCCAGCGGACAGCAGTAC 60  
QY 61 CGAGTACCACTGTATCCGAGCGGAGATGTGCAAGACTCCAGCGGAGATGTGCAAGACTCCGAGTAC 120  
DB 61 CGAGTACCACTGTATCCGAGCGGAGATGTGCAAGACTCCAGCGGAGATGTGCAAGACTCCGAGTAC 120  
QY 121 CTACACACACGAGGAGCTGCTCTTCAAGTGTCAACTGCTGAGGCTGTGATGTCTG 180

Db 121 CTACACACAGGAGCTGCTCTTTCAGTGTCAACCTGGCTGAGGCTGTGATGCTG 180  
 Qy 181 TGAGAGCATGCCAGTGTGGGCTTTGTGTGTCACCAACAGCACTGGAGATGTA 240  
 Db 181 TGAAGCCATGCGCAGTGTGGGCTTTGTGTGTCACCAACAGCACTGGAGATGTA 240  
 Qy 241 GCCAGTGGAGAAAGCCCTTCCAGAGGATGGCAGAGCTCTGTGAGGTTGATAGTAG 300  
 Db 241 GCCAGTGGAGAAAGCCCTTCCAGAGGATGGCAGAGCTCTGTGAGGTTGATAGTAG 300  
 Qy 301 TGATCCCCCATCGGAAGTCAGAGGGGGTGTGAGGTATGAGAGAGATATAGTGTCT 360  
 Db 301 TGATCCCCCATCGGAAGTCAGAGGGGGTGTGAGGTATGAGAGAGATATAGTGTCT 360  
 Qy 361 TCAGAGCATCAATTTAGGAGATGTCTTGTCTCCAGAAAGAGAAACATCCAGCCCTG 420  
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 Qy 421 TTACTCTCACTCTGCCCCCAGGTGGAGCTGTCTTTTCAAGACTGATGAGACC 480  
 Db 421 TTACTCTCACTCTGCCCCCAGGTGGAGCTGTCTTTTCAAGACTGATGAGACC 480  
 Qy 481 AAGTGTCCCTGATCCCAAGACCAATATGTGAAGGCTCTGCTGACTATCTGAG 540  
 Db 481 AAGTGTCCCTGATCCCAAGACCAATATGTGAAGGCTCTGCTGACTATCTGAG 540  
 Qy 541 GGGTGGCTGACCGCTGATCTATCTTCAAGAGCTGGCTGTGAGAGGATGACTT 600  
 Db 541 GGGTGGCTGACCGCTGATCTATCTTCAAGAGCTGGCTGTGAGAGGATGACTT 600  
 Qy 601 GCACTGGCAGACATGTCATCTGAGGAAACCCCTGAGAGCAAAAGCTAATCCAGACA 660  
 Db 601 GCACTGGCAGACATGTCATCTGAGGAAACCCCTGAGAGCAAAAGCTAATCCAGACA 660  
 Qy 661 GACAGATGTGACAGACCAAACTGCAATATGCAAAATGTTAAATGTGATTTACAG 720  
 Db 661 GACAGATGTGACAGACCAAACTGCAATATGCAAAATGTTAAATGTGATTTACAG 720  
 Qy 721 CTGAGCTATGGGAGCTGCTGCTCTTATGTCAGAGATCATGGGGGTATGATCTCTCA 780  
 Db 721 CTGAGCTATGGGAGCTGCTGCTCTTATGTCAGAGATCATGGGGGTATGATCTCTCA 780  
 Qy 781 ACCGTGGGCTGTAGAGCACTAGGCTAGTCTCCCACTGGGGGCTGTGCTCCCT 840  
 Db 781 ACCGTGGGCTGTAGAGCACTAGGCTAGTCTCCCACTGGGGGCTGTGCTCCCT 840  
 Qy 841 GGGACGGTTCCTGGGAGCCCATCACTGTGTTCAATATGTGAGATGTAGCTAAAGC 900  
 Db 841 GGGACGGTTCCTGGGAGCCCATCACTGTGTTCAATATGTGAGATGTAGCTAAAGC 900  
 Qy 901 CCTGTGCTGCTGCTGCTGCAATGCAAGCAGGCGGTGGGGGCTGCTGGGAGCAATCCA 960  
 Db 901 CCTGTGCTGCTGCTGCTGCAATGCAAGCAGGCGGTGGGGGCTGCTGGGAGCAATCCA 960  
 Qy 961 TCGTGGAGTGTCTCTAGCTTAGTGTGACAGAGAGCTTGGCGGGGATGCTCCAGGA 1020  
 Db 961 TCGTGGAGTGTCTCTAGCTTAGTGTGACAGAGAGCTTGGCGGGGATGCTCCAGGA 1020  
 Qy 1021 TGTGGGTGATTTCTGTACTGTGGGAGGCTATCTTGACCTCCGACAGGGGACACTCCAG 1080  
 Db 1021 TGTGGGTGATTTCTGTACTGTGGGAGGCTATCTTGACCTCCGACAGGGGACACTCCAG 1080  
 Qy 1081 GCCAGCCAGGGGTCAAGGGGCAAGGTGCAACCTCAGCATGAGCAAGATGCGGGTACG 1140  
 Db 1081 GCCAGCCAGGGGTCAAGGGGCAAGGTGCAACCTCAGCATGAGCAAGATGCGGGTACG 1140  
 Qy 1141 GGAGCAGGTGTGTGTGAGCAAGACCTGGGGCGGGGTGGGGCGGGGCTTTCTGCT 1200  
 Db 1141 GGAGCAGGTGTGTGTGAGCAAGACCTGGGGCGGGGTGGGGCGGGGCTTTCTGCT 1200  
 Qy 1201 CATTTGCTTTCAATGAAGAGCTCAAGAGCCAAACAGAGGCTTTCCCTCTCGAGT 1260  
 Db 1201 CATTTGCTTTCAATGAAGAGCTCAAGAGCCAAACAGAGGCTTTCCCTCTCGAGT 1260

Db 1201 CATTTGCTTTCAATGAAGAGCTCAAGAGCCAAACAGAGGCTTTCCCTCTCGAGT 1260  
 Qy 1261 TTGAATATCCAGATCTTTTGTACTTCTGTGTGTTAAATGTGTTATTTTGTAAAAAT 1320  
 Db 1261 TTGAATATCCAGATCTTTTGTACTTCTGTGTGTTAAATGTGTTATTTTGTAAAAAT 1320  
 Qy 1321 AAAATAAATTTAGTTAATAAATGATGTTTCAAGCAAACTCTTCCCTAAAAA 1380  
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 Qy 1381 AAAAAAAAAAGCGGTC 1397  
 Db 1381 AAAAAAAAAAGCGGTC 1397

## RESULT 2

US-10-006-285-474  
 ; Sequence 474, Application US/10006285  
 ; Publication No. US20030165854A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Mary Jane Cunningham  
 ; APPLICANT: Matthew R. Kaser  
 ; TITLE OF INVENTION: MARKER GENES RESPONDING TO TREATMENT WITH TOXINS  
 ; FILE REFERENCE: PA-0039 US  
 ; CURRENT APPLICATION NUMBER: US/10/006,285  
 ; CURRENT FILING DATE: 2001-12-05  
 ; NUMBER OF SEQ ID NOS: 514  
 ; SOFTWARE: PERL Program  
 ; SEQ ID NO 474  
 ; LENGTH: 1714  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: misc\_feature  
 ; OTHER INFORMATION: Incyte ID No. US20030165854A1 018653.18  
 US-10-006-285-474

Query Match 67.3%; Score 940.4; DB 13; Length 1714;

Best Local Similarity 84.7%; Pred. No. 2,6e-238;

Matches 1159; Conservative 0; Mismatches 1; Indels 208; Gaps 1;

Qy 1 GGTGTGACCTGTATCCGAGGGGAGATGTTGCAAGACTCCAGCGGCAAGCAGATAC 60  
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 Qy 61 CGAGTACCACTGTATCCAGACAGCACTATCCCGAGGAAGTACCGCTGGCCATC 120  
 Db 615 CGAGTACCACTGTATCCAGACAGCACTATCCCGAGGAAGTACCGCTGGCCATC 674  
 Qy 121 CTACACACAGGAGCTGCTCTTCAAGTGTCAACTGCTGAGGCTGTGATGCTG 180  
 Db 675 CTACACACAGGAGCTGCTCTTCAAGTGTCAACTGCTGAGGCTGTGATGCTG 734  
 Qy 181 TGAAGCATGCCAGTGTGGGCTTTGTGTACCAACAGACCACTGACAGGTGA 240  
 Db 735 TGAAGCATGCCAGTGTGGGCTTTGTGTACCAACAGACCACTGACAGGTGA 787  
 Qy 241 GCCAGTGGAGAAAGCCCTTCAAGGAGATGGCAGACCTCTCTGAGGTGTAGTAG 300  
 Db 788 ----- 787  
 Qy 301 TGATCCCCCATCGGAAGTCAGAGGGGGTGTGAGGTATGAGAGAGATATAGTGTCT 360  
 Db 788 ----- 787  
 Qy 361 TCAGAGCATCAATTTAGGAGATGTCTTGTCTCCAGAAAGAGAAACATCCAGCCCTG 420  
 Db 788 ----- 787  
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 Db 788 ----- 787  
 Qy 788 ----- 787  
 Db 788 ----- 787

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QY 541 GGGCTGGCTACCAAGCTGATCTATCTGAGAGCTGGGCTTGGCTTGGAGGAGTACTT 600
DB 887 GGGCTGGCTACCAAGCTGATCTATCTGAGAGCTGGGCTTGGCTTGGAGGAGTACTT 946
QY 601 GCACTGGCAGCACTGATGTCACCTGGGAAACCCCTGAGCAAAAGCTTAATCCAGACA 660
DB 947 GCACTGGCAGCACTGATGTCACCTGGGAAACCCCTGAGCAAAAGCTTAATCCAGACA 1006
QY 661 GACAGATGTGACGAGCAAAAGCTGCAATATGCAATGTAAATGTAGTTTACAG 720
DB 1007 GACAGATGTGACGAGCAAAAGCTGCAATATGCAATGTAAATGTAGTTTACAG 1066
QY 721 CTTAGCTATGGGAGTCTGCTGCTCTTATGTCAGGATATGAGGGGTATGATGCTCTCCA 780
DB 1067 CTTAGCTATGGGAGTCTGCTGCTCTTATGTCAGGATATGAGGGGTATGATGCTCTCCA 1126
QY 781 ACCCTGGGGCTGTGAACAAGCTCAAGGCTAGTCTCCCACTGGGGGGCTGTGCCCTCCCT 840
DB 1127 ACCCTGGGGCTGTGAACAAGCTCAAGGCTAGTCTCCCACTGGGGGGCTGTGCCCTCCCT 1186
QY 841 GGGACGGTTCCTGTGGGAGCCCATCACTGTGTTCAATAGTGTGAGATGTAGCTAAAGC 900
DB 1187 GGGACGGTTCCTGTGGGAGCCCATCACTGTGTTCAATAGTGTGAGATGTAGCTAAAGC 1246
QY 901 CCTGTGCTGCTGCTGCTGCAATGTCACAGCAAGCGGTGGGGGCTGCTGTGGGAGCAATCCA 960
DB 1247 CCTGTGCTGCTGCTGCTGCAATGTCACAGCAAGCGGTGGGGGCTGCTGTGGGAGCAATCCA 1306
QY 961 TCGTGAAGTGTCTCTAGCTTATGCTGTGAAGAGAGCACTTGGGGGGGATGTCTCCAGGA 1020
DB 1307 TCGTGAAGTGTCTCTAGCTTATGCTGTGAAGAGAGCACTTGGGGGGGATGTCTCCAGGA 1366
QY 1021 TGTGGGAGTGTCTCTAGCTTATGCTGTGAAGAGAGCACTTGGGGGGGATGTCTCCAGGA 1080
DB 1367 TGTGGGAGTGTCTCTAGCTTATGCTGTGAAGAGAGCACTTGGGGGGGATGTCTCCAGGA 1426
QY 1081 GCCAGCCAGGGGTGAGGGGCAAGGTGCAACCTGAGATGAGCCAGAACTGGGGGTGAG 1140
DB 1427 GCCAGCCAGGGGTGAGGGGCAAGGTGCAACCTGAGATGAGCCAGAACTGGGGGTGAG 1486
QY 1141 GAGCAGAGTGTGCTTGAAGCAAGCACTGGGGGGGGGTGGGGCTTGTCTGCTCT 1200
DB 1487 GAGCAGAGTGTGCTTGAAGCAAGCACTGGGGGGGGGTGGGGCTTGTCTGCTCT 1546
QY 1201 CATTGCTTCAATGAAGGCTCAAGCAGCAAAACCAAGGCTTCCCTCTCTGAGT 1260
DB 1547 CATTGCTTCAATGAAGGCTCAAGCAGCAAAACCAAGGCTTCCCTCTCTGAGT 1606
QY 1261 TTGAATATCCAGATCTTTTGTACTTCTTGTGTTAAATGTTTATTTTGTAAAAAT 1320
DB 1607 TTGAATATCCAGATCTTTTGTACTTCTTGTGTTAAATGTTTATTTTGTAAAAAT 1666
QY 1321 AAAATATAATTAATTAATTAATATGTTTACAGCAAACTCTTCCCT 1368
DB 1667 AAAATATAATTAATTAATTAATATGTTTACAGCAAACTCTTCCCT 1714

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RESULT 3
US-09-989-919-14
; Sequence 14, Application US/09989919
; Patent No. US2002016434A1
; GENERAL INFORMATION:
; APPLICANT: Macina, Roberto
; APPLICANT: Recipon, Herre
; APPLICANT: Pluta, Jason
; APPLICANT: Ghosh, Malavika
; APPLICANT: Sun, Yongming
; APPLICANT: Liu, Chenghua
; TITLE OF INVENTION: Compositions and Methods Relating to Colon Specific Genes and Pro

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; FILE REFERENCE: DEX-0289
; CURRENT APPLICATION NUMBER: US/09/989,919
; CURRENT FILING DATE: 2001-11-21
; PRIOR APPLICATION NUMBER: 60/252,505
; PRIOR FILING DATE: 2000-11-22
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 14
; LENGTH: 470
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-989-919-14

Query Match      33.2%; Score 464.2; DB 10; Length 470;
Best Local Similarity 99.4%; Pred. No. 1.7e-112;
Matches 466; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 567 CAGCAGCTGGGCTTGGCTGTGAGGAGTGAATGCTGAGCACTGGAGCACTGCATGTCACTTG 626
DB 2 CAGGTCTGGGCTTGGCTGTGAGGAGTGAATGCTGAGCACTGGAGCACTGCATGTCACTTG 61
QY 627 GGAACCCCTGCAAGCAAAAGCTTAATCCAGACAGCAGATGTGACAGCAAAAGCTGC 686
DB 62 GGAACCCCTGCAAGCAAAAGCTTAATCCAGACAGCAGATGTGACAGCAAAAGCTGC 121
QY 687 AATATATGCCAAATGTAAATGTGATGATTTACAGCTTATGAGGAGTGTGCTCTTA 746
DB 122 AATATATGCCAAATGTAAATGTGATGATTTACAGCTTATGAGGAGTGTGCTCTTA 181
QY 747 GTCCAGGAATCATGGGGGTATGATGCTCTCCCAACCTGTGGGCTGTGAAGCAAGCTCAG 806
DB 182 GTCCAGGAATCATGGGGGTATGATGCTCTCCCAACCTGTGGGCTGTGAAGCAAGCTCAG 241
QY 807 GCTAGTCTCCCACTGGGGGCTGTGCCCTCTCCCTGGGAGAGTTCCTGGGGCAGCCCATC 866
DB 242 GCTAGTCTCCCACTGGGGGCTGTGCCCTCTCCCTGGGAGAGTTCCTGGGGCAGCCCATC 301
QY 867 ACTGTGTTCAATGATGTGAGAAATGTAGCTAAAGCCCTGCTGCTGCTGACATGCCA 926
DB 302 ACTGTGTTCAATGATGTGAGAAATGTAGCTAAAGCCCTGCTGCTGCTGACATGCCA 361
QY 927 CAGCAGCGGTGGGGCTGCTGTTGGGAGCAATCCATGTTGAGTGTCTCTCAGCTTAAAGT 986
DB 362 CAGCAGCGGTGGGGCTGCTGTTGGGAGCAATCCATGTTGAGTGTCTCTCAGCTTAAAGT 421
QY 987 CTGGACAGAGACTTGGCCGGGGATGCTCCAGATGTGGTATTTCTGT 1035
DB 422 CTGGACAGAGACTTGGCCGGGGATGCTCCAGATGTGGTATTTCTGT 470

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RESULT 4
US-09-880-107-1138/c
; Sequence 1138, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Vockley, Joseph G.
; APPLICANT: Schert, Uwe
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
; FILE REFERENCE: 44921-5028-MO
; CURRENT APPLICATION NUMBER: US/09/880,107
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US 60/211,379
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: US 60/237,054
; PRIOR FILING DATE: 2000-10-02
; NUMBER OF SEQ ID NOS: 3950
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1138
; LENGTH: 427
; TYPE: DNA
; ORGANISM: Homo sapiens

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: FEATURE:
: OTHER INFORMATION: Genbank Accession No. US20020142981A1 AA451877
US-03-880-107-1138

Query Match          30.1%; Score 420.8; DB 10; Length 427;
Best Local Similarity 99.5%; Pred. No. 5.1e-10;
Matches 422; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 936 GTGGGGGCTGGCTGGGGGCAATCCATCGTGAAGTCTTCTCAGCTTAGTGTGACACAG 995
Db 427 GTGGGGGCTGGCTGGGGGCAATCCATCGTGAAGTCTTCTCAGCTTAGTGTGACACAG 368
Qy 996 AGACTGGCGGGGGAATGCTCCAGAGATGGGGATTCGTAACCTGGGAGGCTAATCTCG 1055
Db 367 AGACTGGCGGGGGAATGCTCCAGAGATGGGGATTCGTAACCTGGGAGGCTAATCTCG 308
Qy 1056 ACCTCCGACAGGGGACACTCCGACGCCAGGCCAGGGGTCAAGGGGACAGGTGACACT 1115
Db 307 ACCTCCGACAGGGGACACTCCGACGCCAGGCCAGGGGTCAAGGGGACAGGTGACACT 248
Qy 1116 CAGCATGACCCAAAGACTGGGGTCAAGGGACAGGTGTGTTGAGCCAGGACTGGGGCGG 1175
Db 247 CAGCATGACCCAAAGACTGGGGTCAAGGGACAGGTGTGTTGAGCCAGGACTGGGGCGG 188
Qy 1176 GGGTGGGGGCGGGGGCTTCTGCGCTCATTTGCTTCATGTAAGGCTCAAAAGCAGCCAA 1235
Db 187 GGGTGGGACCGGGGGCTTCTGCGCTCATTTGCTTCATGTAAGGCTCAAAAGCAGCCAA 128
Qy 1236 ACAAGGCTTTCCCTCTCTCGAGTTTGATATACAGATCTTTTGTACTTCTTGTGGT 1295
Db 127 ACAAGGCTTTCCCTCTCTCGAGTTTGATATACAGATCTTTTGTACTTCTTGTGGT 68
Qy 1296 TAAATGTTTATTTTGTAAAAATATAAATTAATTAATAAATGATGTTTCACAG 1355
Db 67 TAAATGTTTATTTTGTAAAAATATAAATTAATTAATAAATGATGTTTCACAG 8
Qy 1356 CAAA 1359
Db 7 CAAA 4

RESULT 5
US-10-006-285-304
: Sequence 304, Application US/10006285
: Publication No. US20030165854A1
: GENERAL INFORMATION:
: APPLICANT: Mary Jane Cunningham
: APPLICANT: Matthew R. Kaeser
: TITLE OF INVENTION: MARKER GENES RESPONDING TO TREATMENT WITH TOXINS
: FILE REFERENCE: PA-0039 US
: CURRENT APPLICATION NUMBER: US/10/006_285
: CURRENT FILING DATE: 2001-12-05
: NUMBER OF SEQ ID NOS: 514
: SOFTWARE: PERL Program
: SEQ ID NO 304
: LENGTH: 1358
: TYPE: DNA
: ORGANISM: Rattus norvegicus
: FEATURE:
: NAME/KEY: misc feature
: OTHER INFORMATION: Incyte ID No. US20030165854A1 218659_Rn.1
US-10-006-285-304

Query Match          11.7%; Score 164; DB 13; Length 1358;
Best Local Similarity 84.0%; Pred. No. 1.2e-32;
Matches 210; Conservative 0; Mismatches 35; Indels 5; Gaps 2;

Qy 1 GGTGCTGCACTGTATCCGAGCGGGCAGTATCTGCAAGAACTCCAGCGCAAGCAGATAC 60
Db 260 GGCCTGTGCACTGTATCCGAGGTGGGCACTGACTGCAAGAACTCTA---CAACAGCAGCAGGC 316
Qy 61 CGAGTACAGTGTATCCAGAC--AGACACATCCCCCGAAGAACTACCGCTGCTGGCGCA 118

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Db      317 TAGGTACCAAGGCATCCCGGACAAATTAACATACACAAGAGGATTATCGGTGTGGCCC 376
Oy      119 TCCTACCAACAAGGAGAGCTGCTCTCTTTCAGTGTTCACCTGGTGGCTGTGGATGTC 178
Db      377 TCCATACCAACATGTGTGGCTGCTCTCTCTGTGTTCACCTGGCTGGAGGCTGTAGATGTC 436
Oy      179 TGTGAGAGCCATGCGCCAGTGTGCGGGCCCTTTGTGGTGCACCAACAGACACCACTGGACAGT 238
Db      437 TGTGAGAGCCATGTTCATATGTCGTGCTTGTGGTGCACCAACAGACCACTGGACAGGT 496
Oy      239 GAGCAGCTGG 248
Db      497 CGGAGAGCTGG 506

RESULT 6
US-09-918-995-32213
; Sequence 32213, Application US/09918995
; Publication No. US20030073623A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc.
; TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED
; FILE REFERENCE: 20411-756
; CURRENT APPLICATION NUMBER: US/09/918,995
; CURRENT FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: US/09/235,076
; PRIOR FILING DATE: 1999-01-20
; NUMBER OF SEQ ID NOS: 38054
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 32213
; LENGTH: 493
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1) - (493)
; OTHER INFORMATION: n. = A,T,C or G
US-09-918-995-32213

Query Match      6.9%; Score 97; DB 11; Length 493;
Best Local Similarity 100.0%; Pred.No.3,5e-15;
Matches 97; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy      1 GTGTCTGCACCTGTATCCGAGCGGCGGACGATATCTGCAGAACTCCACGCGCAAGCAGACTAC 60
Db      397 GGTCTCTCACCTGTATCCGAGCGGCGGACGATATCTGCAGAACTCCACGCGCAAGCAGACTAC 456
Oy      61 CGAGTACCAAGTGATTCGCAAGACGACACATCCCCCAG 97
Db      457 CGAGTACCAAGTGATTCGCAAGACGACACATCCCCCAG 493

RESULT 7
US-10-006-285-33
; Sequence 33, Application US/10006285
; Publication No. US20030165854A1
; GENERAL INFORMATION:
; APPLICANT: Mary Jane Cunningham
; APPLICANT: Matthew R. Kaser
; TITLE OF INVENTION: MARKER GENES RESPONDING TO TREATMENT WITH TOXINS
; FILE REFERENCE: PA-0039 US
; CURRENT APPLICATION NUMBER: US/10/006,285
; CURRENT FILING DATE: 2001-12-05
; NUMBER OF SEQ ID NOS: 514
; SOFTWARE: PERL Program
; SEQ ID NO 33
; LENGTH: 250
; TYPE: DNA
; ORGANISM: Rattus norvegicus
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20030165854A1 700175249H1

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US-10-006-285-33

Query Match 5.2%; Score 72.2; DB 13; Length 250;  
Best Local Similarity 63.6%; Pred. No. 8.3e-09;  
Matches 110; Conservative 0; Mismatches 63; Indels 0; Gaps 0;

QY 590 GGGAGTGAATTGCACTGCGACACTGATCTACCTGGGAACCCCTGACAGCAAAAGCTAA 649  
DB 49 GGGTTTGGCTGCTGACAGCGCTGACTTGATGACATAGACCCGGGAAACCTGCAAGACAGAGCTAG 108  
QY 650 CATCCAGACAGACAGATGACAGCAAGCTGCAATATGCAATATGCAATATGCAATATG 709  
DB 109 CGTCCAGACAGCACTGATGACAGCAAGCTGCAATATGCAATATGCAATATGCAATATG 168  
QY 710 GAGTTTACCAAGCTGATGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 762  
DB 169 GAGTTTCCAGACTTTCGGTCTAGAGACTGTTGCTCCAGCTGAGCGTCACTGG 221

## RESULT 8

US-09-960-352-10180/c  
; Sequence 10180; Application US/09960352  
; Patent No. US20020137139A1  
; GENERAL INFORMATION:  
; APPLICANT: Warren, Wesley C.  
; APPLICANT: Byatt, John C.  
; APPLICANT: Mathialagan, Nagappan  
; TITLE OF INVENTION: NUCLEIC ACID AND OTHER MOLECULES ASSOCIATED WITH LACTATION AND  
; FILE REFERENCE: 16511.006/37-21(10298)C  
; CURRENT APPLICATION NUMBER: US/09/960,352  
; NUMBER OF SEQ ID NOS: 15112  
; SEQ ID NO 10180  
; LENGTH: 428  
; TYPE: DNA  
; ORGANISM: Bos taurus  
; OTHER INFORMATION: Clone ID: 44-LIB188-026-Q1-E1-C12  
US-09-960-352-10180

Query Match 4.0%; Score 55.2; DB 10; Length 428;  
Best Local Similarity 70.5%; Pred. No. 0.00038;  
Matches 117; Conservative 0; Mismatches 43; Indels 6; Gaps 3;

QY 903 CTGCTGCTGCTGCTGCAATGCAAGAGCGGTGGGGGCTGCTGGGGGCAATCATC 962  
DB 427 CTGCTGCTGCTGCTGCAATGCAAGAGCGGTGGGGGCTGCTGGGGGCAATCATC 370  
QY 963 GTGGAG--TGTTCTCTGAGCTTGAAGTCTGAGACGAACTTGGGGGGGATGCTCCAGCA 1020  
DB 369 ATGAGAGCACTTCTCTTTCAGCAAGCTCTCTGAGCGAGAACTTTGAA--GGATGCTCCAGA 312  
QY 1021 TGTGGTGAATCTGTACTGAGGAGGCTATCTGACTCTGACCTCCAGCA 1066  
DB 311 TGTGGGGAATCTGTACTGAGGAGGCTATCTGACTCTGACCTCCAGCA 266

## RESULT 9

US-09-814-353-4739/c  
; Sequence 4739; Application US/09814353  
; Publication No. US20030155831A1  
; GENERAL INFORMATION:  
; APPLICANT: Lee, John  
; APPLICANT: Thompson, Pamela  
; APPLICANT: Lillie, James  
; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR  
; TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND  
; TITLE OF INVENTION: THERAPY OF OVARIAN CANCER  
; FILE REFERENCE: MRI-006B  
; CURRENT APPLICATION NUMBER: US/09/814,353  
; CURRENT FILING DATE: 2001-03-21  
; PRIOR APPLICATION NUMBER: US 60/191,031

; PRIOR FILING DATE: 2000-03-21  
; PRIOR APPLICATION NUMBER: US 60/207,124  
; PRIOR FILING DATE: 2000-05-25  
; PRIOR APPLICATION NUMBER: US 60/211,940  
; PRIOR FILING DATE: 2000-06-15  
; PRIOR APPLICATION NUMBER: US 60/216,820  
; PRIOR FILING DATE: 2000-07-07  
; PRIOR APPLICATION NUMBER: US 60/220,661  
; PRIOR FILING DATE: 2000-07-25  
; PRIOR APPLICATION NUMBER: US 60/257,672  
; PRIOR FILING DATE: 2000-12-21  
; NUMBER OF SEQ ID NOS: 22037  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 4739  
; LENGTH: 664  
; TYPE: DNA  
; ORGANISM: Homo sapiens

; NAME/KEY: misc.feature  
; LOCATION: 53, 54, 159, 161, 174, 177, 178, 180, 182, 185, 212, 215,  
; LOCATION: 216, 219, 220, 226, 237, 247, 248, 265, 269, 278, 281, 283,  
; LOCATION: 289, 294, 298, 299, 300, 301, 302, 304, 305, 307, 308, 316,  
; LOCATION: 327, 333, 334, 335, 336, 339, 343, 344, 345, 348, 368  
; OTHER INFORMATION: n = A,T,C or G  
; FEATURE:  
; NAME/KEY: misc.feature  
; LOCATION: 377, 383, 386, 388, 390, 409, 429, 431, 433, 439, 447, 450,  
; LOCATION: 452, 460, 462, 473, 474, 475, 477, 484, 486, 508, 509, 510,  
; LOCATION: 511, 513, 514, 515, 518, 519, 520, 522, 525, 528, 530, 532,  
; LOCATION: 533, 541, 542, 543, 544, 547, 550, 552, 561, 564, 570  
; OTHER INFORMATION: n = A,T,C or G  
; FEATURE:  
; NAME/KEY: misc.feature  
; LOCATION: 573, 575, 578, 584, 600, 601, 603, 606, 607, 616, 623, 625,  
; LOCATION: 626, 642  
; OTHER INFORMATION: n = A,T,C or G  
US-09-814-353-4739

Query Match 3.9%; Score 53.8; DB 13; Length 664;  
Best Local Similarity 55.4%; Pred. No. 0.0012;  
Matches 82; Conservative 0; Mismatches 66; Indels 0; Gaps 0;

QY 1243 TTTCCCTCTCTGCTGATGATGCAATCTTGTGATCTTGTGATCTTGTGATCTTGTG 1302  
DB 270 TTTCTTTTCTCTGATGATGCAATCTTGTGATCTTGTGATCTTGTGATCTTGTG 211  
QY 1303 TTTATTTTGTAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 1362  
DB 210 TTTATTTTGTAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 151  
QY 1363 TTCCCTAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 1390  
DB 150 CCCAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 123

## RESULT 10

US-09-814-353-11036/c  
; Sequence 11036; Application US/09814353  
; Publication No. US20030155831A1  
; GENERAL INFORMATION:  
; APPLICANT: Lee, John  
; APPLICANT: Thompson, Pamela  
; APPLICANT: Lillie, James  
; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR  
; TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND  
; TITLE OF INVENTION: THERAPY OF OVARIAN CANCER  
; FILE REFERENCE: MRI-006B  
; CURRENT APPLICATION NUMBER: US/09/814,353  
; CURRENT FILING DATE: 2001-03-21  
; PRIOR APPLICATION NUMBER: US 60/191,031  
; PRIOR FILING DATE: 2000-03-21  
; PRIOR APPLICATION NUMBER: US 60/207,124  
; PRIOR FILING DATE: 2000-05-25





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Db      152 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAATTGTTAAATAAAA    93
QY      1379 AAAAAAAAAAAGG 1392
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Db      92 AAAAAAAAAAAG 79

RESULT 13
US-09-960-352-15014
; Sequence 15014, Application US/09960352
; Patent No. US20020137139A1
GENERAL INFORMATION:
APPLICANT: Warren, Wesley C.
APPLICANT: Tao, Nengping
APPLICANT: Byatt, John C.
APPLICANT: Mithalagan, Nagappan
TITLE OF INVENTION: NUCLEIC ACID AND OTHER MOLECULES ASSOCIATED WITH LACTATION AND
FILE REFERENCE: 16511.006/37-21(10298)C
CURRENT APPLICATION NUMBER: US/09/960.352
NUMBER OF SEQ ID NOS: 15112
SEQ ID NO 15014
LENGTH: 375
TYPE: DNA
ORGANISM: Bos taurus
OTHER INFORMATION: Clone ID: 64-LIB3058-048-Q1-K1-H8
US-09-960-352-15014

Query Match          3.7%; Score 51; DB 10; Length 375;
Bee Local Similarity 61.8%; Pred.No. 0.0045;
Matches   81; Conservative   0; Mismatches 50; Indels   0; Gaps   0;

QY      1260 TTGAATCCAGAATCTTGTGGTCCTTGTAATTGTTTTGTTAAATAA 1319
         |||||||
Db       131 TTTTITTTTATATATTTTITTTATTTTATTTATTTTATTTATTTTAAATAA 190
           |
QY      1320 TAAATATAATTAGTTATATAATGATGTTGCACAGCAACTCTGCCATAAAAAAAAA 1379
         |||||||
Db       191 TAAAAAANAANAATAATATATATTTTAAAAAAGATCGAAAAAATAAT 250
           |
QY      1380 AAAAAAAAAA 1390
         |||||||
Db       251 AAAAAAAAAA 261

RESULT 14
US-09-834-975-451/c
; Sequence 451, Application US/09834975
; Patent No. US20020110815A1
GENERAL INFORMATION:
APPLICANT: Lililie, James
APPLICANT: Brown, Jeffrey
APPLICANT: Bolt, Andrew
APPLICANT: Van Hufel, Christophe
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS AND METHODS
FILE REFERENCE: MRI-016B
CURRENT APPLICATION NUMBER: US/09/834.975
PRIOR FILING DATE: 2001-04-13
PRIOR APPLICATION NUMBER: 60/197,538
NUMBER OF SEQ ID NOS: 1046
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 451
LENGTH: 425
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(425)
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OTHER INFORMATION: n = A,T,C or G
US-09-834-975-451

Query Match
Best Local Similarity 53.7%; Score 50.6; DB 10; Length 425;
Matches: 101; Conservative 0; Mismatches 87; Indels 0; Gaps 0;

OY 1203 TTTCCTTCATGAAACGCTCAAGACGCCAAAAACGAGCTTCCCTCCTGAATTT 1282
Db 223 TTTTCTTTTAAAAAAGGGGGGGGAAAAAAAAAACCCTTTTCTTTT 164

OY 1263 GAATATCCAGATCTTTGTACTCTTGTTGTTAAATGTTATTTTGTAAAAATA 1322
Db 163 TGGGGGAAATTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT 104

OY 1323 AATATAATAGTTAATATAATGATGTTTCACAGCAACTCTTCCCTAAAAA 1382
Db 103 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 44

OY 1383 AAAAAAA 1390
Db 43 AAAAAAA 36

RESULT 15
US-10-311-455-293/c
; Sequence 293, Application US/10311455
; Publication No. US20030143606A1
; GENERAL INFORMATION:
APPLICANT: OLEK, Alexander
APPLICANT: PIEPENBROCK, Christian
APPLICANT: BEHLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated with the Immune System by Detecting
TITLE OF INVENTION: Cytosine methylation
FILE REFERENCE: 5013.1014
CURRENT APPLICATION NUMBER: US/10/311.455
CURRENT FILING DATE: 2002-12-16
PRIOR APPLICATION NUMBER: PCT/EP01/07537
PRIOR FILING DATE: 2001-07-02
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 2424
SEQ ID NO 293
LENGTH: 16688
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-311-455-293

Query Match
Best Local Similarity 53.9%; Score 50.6; DB 13; Length 16688;
Matches 104; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

OY 1198 CTCATCTTGGTTTCATGAAAGCCTCAAGCAGCAAAACGAGCTTCCCTCTCG 1257
Db 13638 CTCCTTCTCTCAATAAATAATACATCACTTACATTAATAATACCGCAATACT 13579

OY 1258 AGTTGAATATCCGAATCTTTGTACTCTTGTTGTTAAATGTTATTTTGTAAA 1317
Db 13578 TCTATATATATCTTTTAAATATCTTCTCTCTCTCTCTCTTTTCTTTTATA 13519

OY 1318 AATATAATATAATAGTTATATAAATGATGTTTCACAGCAAACTCTCCCTAAAAA 1377
Db 13518 TTTACAAAAACATTAATCAATTAATTAATTTTCCAAAAATTAACCTTTAATACTA 13459

OY 1378 AAAAAAAAAA 1390
Db 13458 TATATAAAACAA 13446

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Wed Dec 17 09:19:21 2003

us-09-989-919-15.rnpb

Page 8

Search completed: December 13, 2003, 20:13:19  
Job time : 361 secs

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OM nucleic - nucleic search, using sw model

Run on: December 13, 2003, 19:07:47 ; Search time 80 Seconds  
(Without alignments)  
7707.653 Million cell updates/sec

Title: US-09-989-919-15

Perfect score: 1397  
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Searched: 569978 seqs, 220691566 residues

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Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Listing first 1000 summaries

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Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

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| 1          | 27    | 1.9         | 693    | 4  | US-09-220-132-133  |
| 2          | 27    | 1.9         | 775    | 4  | US-09-220-132-191  |
| 3          | 27    | 1.9         | 1223   | 4  | US-09-220-132-175  |
| 4          | 27    | 1.9         | 1817   | 1  | US-08-473-981A-5   |
| 5          | 27    | 1.9         | 1817   | 2  | US-08-474-087A-5   |
| 6          | 27    | 1.9         | 2114   | 4  | US-09-130-491-7    |
| 7          | 27    | 1.9         | 99500  | 4  | US-09-798-096-10   |
| 8          | 27    | 1.9         | 511    | 4  | US-09-328-475C-196 |
| 9          | 26    | 1.9         | 899    | 3  | US-09-122-400B-11  |
| 10         | 26    | 1.9         | 1337   | 4  | US-09-257-179-28   |
| 11         | 26    | 1.9         | 1509   | 4  | US-09-620-312D-722 |
| 12         | 26    | 1.9         | 1569   | 4  | US-09-482-273-51   |
| 13         | 26    | 1.9         | 1730   | 4  | US-09-489-847-48   |
| 14         | 26    | 1.9         | 1758   | 3  | US-08-836-567-3    |
| 15         | 26    | 1.9         | 1758   | 4  | US-09-606-304-3    |
| 16         | 26    | 1.9         | 2093   | 4  | US-08-287-001A-1   |
| 17         | 26    | 1.9         | 2093   | 5  | PCT-US95-08941-1   |
| 18         | 26    | 1.9         | 2660   | 4  | US-09-634-955B-1   |
| 19         | 26    | 1.9         | 3149   | 4  | US-09-016-434-1453 |
| 20         | 26    | 1.9         | 3289   | 2  | US-09-904-615-11   |
| 21         | 26    | 1.9         | 3891   | 2  | US-08-969-630-3    |
| 22         | 26    | 1.9         | 8912   | 4  | US-08-469-260A-11  |
| 23         | 26    | 1.9         | 8912   | 4  | US-08-468-446-11   |
| 24         | 26    | 1.9         | 8912   | 4  | US-08-467-344A-11  |
| 25         | 26    | 1.9         | 9143   | 2  | US-08-639-857-32   |
| 26         | 26    | 1.9         | 9143   | 4  | US-08-469-260A-390 |
| 27         | 26    | 1.9         | 9143   | 4  | US-08-469-260A-393 |

|       |    |     |        |   |                    |                   |
|-------|----|-----|--------|---|--------------------|-------------------|
| C 28  | 26 | 1.9 | 9143   | 4 | US-08-488-446-390  | Sequence 390, App |
| C 29  | 26 | 1.9 | 9143   | 4 | US-08-488-446-393  | Sequence 393, App |
| C 30  | 26 | 1.9 | 9143   | 4 | US-08-467-344A-390 | Sequence 390, App |
| C 31  | 26 | 1.9 | 9143   | 4 | US-08-467-344A-393 | Sequence 393, App |
| C 32  | 26 | 1.9 | 14753  | 4 | US-09-821-736-3    | Sequence 3, App1  |
| C 33  | 26 | 1.9 | 46718  | 4 | US-09-816-093-3    | Sequence 3, App1  |
| C 34  | 26 | 1.9 | 152331 | 3 | US-09-128-155-16   | Sequence 16, App1 |
| C 35  | 26 | 1.9 | 176373 | 3 | US-09-128-155-17   | Sequence 17, App1 |
| C 36  | 25 | 1.8 | 58     | 2 | US-08-417-174-42   | Sequence 42, App1 |
| C 37  | 25 | 1.8 | 58     | 2 | US-08-231-565A-40  | Sequence 40, App1 |
| C 38  | 25 | 1.8 | 58     | 2 | US-09-007-961-40   | Sequence 40, App1 |
| C 39  | 25 | 1.8 | 58     | 3 | US-09-267-493-42   | Sequence 42, App1 |
| C 40  | 25 | 1.8 | 58     | 4 | US-09-073-138-42   | Sequence 42, App1 |
| C 41  | 25 | 1.8 | 62     | 3 | US-09-109-377-1    | Sequence 1, App1  |
| C 42  | 25 | 1.8 | 319    | 3 | US-07-593-657-14   | Sequence 14, App1 |
| C 43  | 25 | 1.8 | 506    | 3 | US-09-328-111-746  | Sequence 746, App |
| C 44  | 25 | 1.8 | 523    | 2 | US-08-628-413-1    | Sequence 1, App1  |
| C 45  | 25 | 1.8 | 566    | 3 | US-09-328-111-466  | Sequence 466, App |
| C 46  | 25 | 1.8 | 576    | 3 | US-09-385-982-437  | Sequence 437, App |
| C 47  | 25 | 1.8 | 593    | 3 | US-09-328-111-528  | Sequence 528, App |
| C 48  | 25 | 1.8 | 604    | 4 | US-09-288-143-62   | Sequence 62, App  |
| C 49  | 25 | 1.8 | 611    | 3 | US-09-385-982-357  | Sequence 357, App |
| C 50  | 25 | 1.8 | 646    | 4 | US-09-288-143-22   | Sequence 22, App1 |
| C 51  | 25 | 1.8 | 868    | 3 | US-08-889-502-20   | Sequence 20, App1 |
| C 52  | 25 | 1.8 | 889    | 1 | US-08-661-168-4    | Sequence 4, App1  |
| C 53  | 25 | 1.8 | 940    | 4 | US-09-091-097-11   | Sequence 11, App1 |
| C 54  | 25 | 1.8 | 1009   | 4 | US-09-291-922-15   | Sequence 15, App1 |
| C 55  | 25 | 1.8 | 1018   | 4 | US-09-699-266A-1   | Sequence 1, App1  |
| C 56  | 25 | 1.8 | 1088   | 1 | US-08-726-525-3    | Sequence 3, App1  |
| C 57  | 25 | 1.8 | 1088   | 1 | US-08-487-942-3    | Sequence 3, App1  |
| C 58  | 25 | 1.8 | 1088   | 2 | US-08-726-036A-3   | Sequence 3, App1  |
| C 59  | 25 | 1.8 | 1088   | 4 | US-09-083-516-3    | Sequence 3, App1  |
| C 60  | 25 | 1.8 | 1116   | 4 | US-09-372-422A-41  | Sequence 41, App1 |
| C 61  | 25 | 1.8 | 1181   | 1 | US-08-181-271A-27  | Sequence 27, App1 |
| C 62  | 25 | 1.8 | 1181   | 1 | US-08-449-315-27   | Sequence 27, App1 |
| C 63  | 25 | 1.8 | 1181   | 1 | US-08-449-803-27   | Sequence 27, App1 |
| C 64  | 25 | 1.8 | 1181   | 1 | US-08-449-043-27   | Sequence 27, App1 |
| C 65  | 25 | 1.8 | 1181   | 1 | US-08-456-265A-27  | Sequence 27, App1 |
| C 66  | 25 | 1.8 | 1181   | 1 | US-08-455-416-27   | Sequence 27, App1 |
| C 67  | 25 | 1.8 | 1181   | 1 | US-08-455-244-27   | Sequence 27, App1 |
| C 68  | 25 | 1.8 | 1181   | 1 | US-08-454-876-27   | Sequence 27, App1 |
| C 69  | 25 | 1.8 | 1181   | 2 | US-08-457-364-27   | Sequence 27, App1 |
| C 70  | 25 | 1.8 | 1181   | 2 | US-08-456-262-27   | Sequence 27, App1 |
| C 71  | 25 | 1.8 | 1181   | 2 | US-08-456-240-27   | Sequence 27, App1 |
| C 72  | 25 | 1.8 | 1181   | 2 | US-08-455-736-27   | Sequence 27, App1 |
| C 73  | 25 | 1.8 | 1181   | 2 | US-08-971-217-27   | Sequence 27, App1 |
| C 74  | 25 | 1.8 | 1181   | 2 | US-09-350-600-27   | Sequence 27, App1 |
| C 75  | 25 | 1.8 | 1200   | 3 | US-08-859-167-5    | Sequence 5, App1  |
| C 76  | 25 | 1.8 | 1200   | 3 | US-09-109-273-5    | Sequence 5, App1  |
| C 77  | 25 | 1.8 | 1200   | 4 | US-09-276-993-5    | Sequence 5, App1  |
| C 78  | 25 | 1.8 | 1225   | 4 | US-09-216-393B-282 | Sequence 282, App |
| C 79  | 25 | 1.8 | 1225   | 4 | US-09-216-393B-284 | Sequence 284, App |
| C 80  | 25 | 1.8 | 1241   | 4 | US-07-593-657-6    | Sequence 6, App1  |
| C 81  | 25 | 1.8 | 1241   | 3 | US-08-942-012B-3   | Sequence 3, App1  |
| C 82  | 25 | 1.8 | 1274   | 3 | US-08-335-844A-13  | Sequence 13, App1 |
| C 83  | 25 | 1.8 | 1274   | 4 | US-09-129-366-13   | Sequence 13, App1 |
| C 84  | 25 | 1.8 | 1280   | 4 | US-09-220-132-135  | Sequence 135, App |
| C 85  | 25 | 1.8 | 1280   | 4 | US-07-885-970A-17  | Sequence 17, App1 |
| C 86  | 25 | 1.8 | 1283   | 1 | US-08-298-687A-18  | Sequence 18, App1 |
| C 87  | 25 | 1.8 | 1283   | 1 | US-08-530-797-18   | Sequence 18, App1 |
| C 88  | 25 | 1.8 | 1283   | 1 | US-08-298-829-17   | Sequence 17, App1 |
| C 89  | 25 | 1.8 | 1283   | 2 | US-08-787-335-18   | Sequence 18, App1 |
| C 90  | 25 | 1.8 | 1283   | 2 | US-09-425-578-3    | Sequence 3, App1  |
| C 91  | 25 | 1.8 | 1283   | 4 | US-09-818-512-1    | Sequence 1, App1  |
| C 92  | 25 | 1.8 | 1564   | 4 | US-09-489-847-11   | Sequence 11, App1 |
| C 93  | 25 | 1.8 | 1564   | 4 | US-09-018-812-1    | Sequence 1, App1  |
| C 94  | 25 | 1.8 | 1829   | 5 | PCT-US96-10618-1   | Sequence 1, App1  |
| C 95  | 25 | 1.8 | 1829   | 5 | US-08-840-767-51   | Sequence 51, App1 |
| C 96  | 25 | 1.8 | 1921   | 3 | US-09-461-697-292  | Sequence 292, App |
| C 97  | 25 | 1.8 | 1965   | 3 | US-08-840-767-1    | Sequence 1, App1  |
| C 98  | 25 | 1.8 | 2263   | 4 | US-08-997-685A-9   | Sequence 9, App1  |
| C 99  | 25 | 1.8 | 2263   | 4 | US-08-477-674-9    | Sequence 9, App1  |
| C 100 | 25 | 1.8 | 2285   | 1 |                    |                   |

|     |    |     |        |   |                    |                    |     |    |     |     |   |                    |                    |
|-----|----|-----|--------|---|--------------------|--------------------|-----|----|-----|-----|---|--------------------|--------------------|
| 101 | 25 | 1.8 | 2285   | 1 | US-08-473-791-9    | Sequence 9, Appl1  | 174 | 24 | 1.7 | 314 | 4 | US-09-883-717-7    | Sequence 7, Appl1  |
| 102 | 25 | 1.8 | 2285   | 2 | US-08-316-714-9    | Sequence 9, Appl1  | 175 | 24 | 1.7 | 314 | 4 | US-09-757-949-7    | Sequence 7, Appl1  |
| 103 | 25 | 1.8 | 2285   | 3 | US-08-473-673-9    | Sequence 9, Appl1  | 176 | 24 | 1.7 | 321 | 2 | US-08-520-678A-23  | Sequence 23, Appl1 |
| 104 | 25 | 1.8 | 2456   | 3 | US-08-813-150-5    | Sequence 5, Appl1  | 177 | 24 | 1.7 | 321 | 3 | US-08-897-126-23   | Sequence 23, Appl1 |
| 105 | 25 | 1.8 | 2456   | 4 | US-09-546-553-5    | Sequence 5, Appl1  | 178 | 24 | 1.7 | 325 | 2 | US-08-541-033A-14  | Sequence 14, Appl1 |
| 106 | 25 | 1.8 | 2672   | 1 | US-08-703-947-1    | Sequence 1, Appl1  | 179 | 24 | 1.7 | 325 | 2 | US-08-828-451-14   | Sequence 14, Appl1 |
| 107 | 25 | 1.8 | 2779   | 4 | US-09-149-476-191  | Sequence 191, Appl | 180 | 24 | 1.7 | 326 | 4 | US-09-629-645B-17  | Sequence 17, Appl1 |
| 108 | 25 | 1.8 | 2861   | 2 | US-08-770-301A-12  | Sequence 12, Appl1 | 181 | 24 | 1.7 | 330 | 3 | US-09-078-294-24   | Sequence 24, Appl1 |
| 109 | 25 | 1.8 | 2861   | 3 | US-09-175-581-12   | Sequence 12, Appl1 | 182 | 24 | 1.7 | 349 | 4 | US-09-105-542B-6   | Sequence 6, Appl1  |
| 110 | 25 | 1.8 | 2880   | 1 | US-08-158-189-1    | Sequence 1, Appl1  | 183 | 24 | 1.7 | 361 | 2 | US-08-465-380-3    | Sequence 3, Appl1  |
| 111 | 25 | 1.8 | 2907   | 3 | US-09-232-200-52   | Sequence 52, Appl1 | 184 | 24 | 1.7 | 361 | 2 | US-08-486-397-39   | Sequence 39, Appl1 |
| 112 | 25 | 1.8 | 2907   | 4 | US-09-232-197-52   | Sequence 52, Appl1 | 185 | 24 | 1.7 | 361 | 2 | US-08-486-399-39   | Sequence 39, Appl1 |
| 113 | 25 | 1.8 | 2907   | 4 | US-09-232-201-52   | Sequence 52, Appl1 | 186 | 24 | 1.7 | 361 | 2 | US-08-461-965-39   | Sequence 39, Appl1 |
| 114 | 25 | 1.8 | 2917   | 3 | US-09-232-200-26   | Sequence 26, Appl1 | 187 | 24 | 1.7 | 361 | 2 | US-08-634-641-39   | Sequence 39, Appl1 |
| 115 | 25 | 1.8 | 2917   | 4 | US-09-232-197-26   | Sequence 26, Appl1 | 188 | 24 | 1.7 | 361 | 3 | US-09-249-471-39   | Sequence 39, Appl1 |
| 116 | 25 | 1.8 | 2917   | 4 | US-09-232-201-26   | Sequence 26, Appl1 | 189 | 24 | 1.7 | 361 | 3 | US-09-249-472-39   | Sequence 39, Appl1 |
| 117 | 25 | 1.8 | 3001   | 4 | US-09-539-333D-153 | Sequence 153, App  | 190 | 24 | 1.7 | 361 | 3 | US-09-249-451-39   | Sequence 39, Appl1 |
| 118 | 25 | 1.8 | 3148   | 3 | US-08-909-954-1    | Sequence 1, Appl1  | 191 | 24 | 1.7 | 361 | 3 | US-08-809-455-39   | Sequence 39, Appl1 |
| 119 | 25 | 1.8 | 4066   | 4 | US-09-367-750-1    | Sequence 51, Appl1 | 192 | 24 | 1.7 | 361 | 3 | US-09-249-448-39   | Sequence 39, Appl1 |
| 120 | 25 | 1.8 | 4586   | 1 | US-08-832-883-53   | Sequence 53, Appl1 | 193 | 24 | 1.7 | 361 | 4 | US-09-249-473-39   | Sequence 39, Appl1 |
| 121 | 25 | 1.8 | 4586   | 2 | US-08-832-877-53   | Sequence 53, Appl1 | 194 | 24 | 1.7 | 361 | 4 | US-08-541-033A-13  | Sequence 13, Appl1 |
| 122 | 25 | 1.8 | 4698   | 1 | US-07-807-043B-5   | Sequence 5, Appl1  | 195 | 24 | 1.7 | 367 | 2 | US-08-828-451-13   | Sequence 13, Appl1 |
| 123 | 25 | 1.8 | 4698   | 1 | US-08-289-849B-5   | Sequence 5, Appl1  | 196 | 24 | 1.7 | 367 | 2 | US-09-885-982-494  | Sequence 94, App   |
| 124 | 25 | 1.8 | 4698   | 2 | US-08-142-368A-5   | Sequence 5, Appl1  | 198 | 24 | 1.7 | 433 | 3 | US-07-987-272A-13  | Sequence 13, Appl1 |
| 125 | 25 | 1.8 | 4698   | 2 | US-08-967-727-5    | Sequence 5, Appl1  | 199 | 24 | 1.7 | 442 | 4 | US-09-372-422A-35  | Sequence 35, Appl1 |
| 126 | 25 | 1.8 | 4698   | 3 | US-08-037-230D-5   | Sequence 5, Appl1  | 200 | 24 | 1.7 | 452 | 4 | US-09-397-787-237  | Sequence 237, App  |
| 127 | 25 | 1.8 | 4698   | 4 | US-09-583-850-5    | Sequence 5, Appl1  | 201 | 24 | 1.7 | 487 | 4 | US-09-328-475C-239 | Sequence 239, App  |
| 128 | 25 | 1.8 | 4698   | 4 | US-09-579-197-5    | Sequence 5, Appl1  | 202 | 24 | 1.7 | 488 | 4 | US-09-357-179-22   | Sequence 22, Appl1 |
| 129 | 25 | 1.8 | 4698   | 4 | US-09-404-026-5    | Sequence 1, Appl1  | 203 | 24 | 1.7 | 499 | 4 | US-09-480-251-1    | Sequence 1, Appl1  |
| 130 | 25 | 1.8 | 8600   | 4 | US-09-457-708-1    | Sequence 1, Appl1  | 204 | 24 | 1.7 | 499 | 4 | US-09-328-475C-211 | Sequence 211, App  |
| 131 | 25 | 1.8 | 8600   | 4 | US-09-950-046A-1   | Sequence 1, Appl1  | 205 | 24 | 1.7 | 500 | 2 | US-08-967-101-82   | Sequence 82, Appl1 |
| 132 | 25 | 1.8 | 13187  | 4 | US-09-422-936-61   | Sequence 61, Appl1 | 206 | 24 | 1.7 | 500 | 2 | US-08-592-541-82   | Sequence 82, Appl1 |
| 133 | 25 | 1.8 | 36741  | 3 | US-09-301-665-3    | Sequence 3, Appl1  | 207 | 24 | 1.7 | 500 | 3 | US-09-124-698-82   | Sequence 82, Appl1 |
| 134 | 25 | 1.8 | 43795  | 3 | US-08-742-185-101  | Sequence 101, App  | 208 | 24 | 1.7 | 500 | 3 | US-09-127-480-82   | Sequence 82, Appl1 |
| 135 | 25 | 1.8 | 51719  | 4 | US-09-918-686-2    | Sequence 2, Appl1  | 209 | 24 | 1.7 | 500 | 3 | US-08-996-841C-82  | Sequence 82, Appl1 |
| 136 | 25 | 1.8 | 65042  | 4 | US-09-784-316-3    | Sequence 3, Appl1  | 210 | 24 | 1.7 | 500 | 4 | US-09-124-523-82   | Sequence 82, Appl1 |
| 137 | 25 | 1.8 | 66804  | 4 | US-09-740-041-3    | Sequence 3, Appl1  | 211 | 24 | 1.7 | 500 | 4 | US-09-636-796B-82  | Sequence 82, Appl1 |
| 138 | 25 | 1.8 | 92139  | 4 | US-09-918-686-1    | Sequence 1, Appl1  | 212 | 24 | 1.7 | 500 | 4 | US-08-431-048B-82  | Sequence 82, Appl1 |
| 139 | 25 | 1.8 | 14857  | 4 | US-09-801-876B-3   | Sequence 3, Appl1  | 213 | 24 | 1.7 | 506 | 4 | US-09-442-631-1    | Sequence 1, Appl1  |
| 140 | 25 | 1.8 | 174493 | 4 | US-09-804-471A-3   | Sequence 3, Appl1  | 215 | 24 | 1.7 | 515 | 4 | US-09-130-158A-3   | Sequence 3, Appl1  |
| 141 | 25 | 1.8 | 246240 | 2 | US-08-724-394A-20  | Sequence 20, Appl  | 216 | 24 | 1.7 | 511 | 4 | US-09-288-143-50   | Sequence 50, Appl1 |
| 142 | 25 | 1.8 | 246240 | 2 | US-08-724-394A-21  | Sequence 21, Appl  | 217 | 24 | 1.7 | 569 | 4 | US-09-461-325-44   | Sequence 44, Appl1 |
| 143 | 25 | 1.8 | 246240 | 2 | US-08-724-394A-22  | Sequence 22, Appl  | 218 | 24 | 1.7 | 578 | 4 | US-09-461-325-87   | Sequence 87, Appl1 |
| 144 | 24 | 1.7 | 39     | 3 | US-09-120-386-4    | Sequence 4, Appl1  | 219 | 24 | 1.7 | 585 | 4 | US-08-938-548B-5   | Sequence 5, Appl1  |
| 145 | 24 | 1.7 | 39     | 3 | US-09-120-501-4    | Sequence 4, Appl1  | 220 | 24 | 1.7 | 585 | 4 | US-08-939-092A-5   | Sequence 5, Appl1  |
| 146 | 24 | 1.7 | 39     | 4 | US-09-120-689-5    | Sequence 5, Appl1  | 221 | 24 | 1.7 | 611 | 4 | US-09-385-982-278  | Sequence 278, App  |
| 147 | 24 | 1.7 | 39     | 4 | US-09-619-103-4    | Sequence 4, Appl1  | 222 | 24 | 1.7 | 611 | 4 | US-09-205-258-109  | Sequence 109, App  |
| 148 | 24 | 1.7 | 48     | 1 | US-08-380-438-6    | Sequence 6, Appl1  | 223 | 24 | 1.7 | 623 | 3 | US-09-385-982-207  | Sequence 207, App  |
| 149 | 24 | 1.7 | 80     | 3 | US-09-165-264-5    | Sequence 5, Appl1  | 224 | 24 | 1.7 | 628 | 4 | US-09-227-357-104  | Sequence 104, App  |
| 150 | 24 | 1.7 | 80     | 3 | US-09-165-264-6    | Sequence 6, Appl1  | 225 | 24 | 1.7 | 637 | 4 | US-09-320-132-115  | Sequence 115, App  |
| 151 | 24 | 1.7 | 94     | 4 | US-09-404-879A-261 | Sequence 261, App  | 226 | 24 | 1.7 | 638 | 3 | US-09-328-111-847  | Sequence 847, App  |
| 152 | 24 | 1.7 | 94     | 4 | US-09-338-933-261  | Sequence 261, App  | 227 | 24 | 1.7 | 665 | 4 | US-09-227-357-66   | Sequence 66, Appl1 |
| 153 | 24 | 1.7 | 94     | 4 | US-09-215-681-861  | Sequence 261, App  | 228 | 24 | 1.7 | 700 | 1 | US-08-463-115-38   | Sequence 38, Appl1 |
| 154 | 24 | 1.7 | 104    | 2 | US-08-803-899-8    | Sequence 8, Appl1  | 229 | 24 | 1.7 | 700 | 1 | US-08-465-388-38   | Sequence 38, Appl1 |
| 155 | 24 | 1.7 | 140    | 1 | US-08-628-417-5    | Sequence 5, Appl1  | 230 | 24 | 1.7 | 704 | 3 | US-09-313-300-6    | Sequence 6, Appl1  |
| 156 | 24 | 1.7 | 153    | 3 | US-09-244-794A-3   | Sequence 3, Appl1  | 231 | 24 | 1.7 | 719 | 1 | US-09-122-400B-8   | Sequence 8, Appl1  |
| 157 | 24 | 1.7 | 153    | 3 | US-09-247-190-3    | Sequence 3, Appl1  | 232 | 24 | 1.7 | 719 | 1 | US-08-375-346A-1   | Sequence 1, Appl1  |
| 158 | 24 | 1.7 | 153    | 3 | US-09-238-710-3    | Sequence 3, Appl1  | 233 | 24 | 1.7 | 719 | 2 | US-08-467-123B-1   | Sequence 1, Appl1  |
| 159 | 24 | 1.7 | 159    | 3 | US-09-244-794A-17  | Sequence 17, Appl  | 234 | 24 | 1.7 | 728 | 4 | US-09-091-097-5    | Sequence 5, Appl1  |
| 160 | 24 | 1.7 | 159    | 4 | US-09-247-190-17   | Sequence 17, Appl  | 235 | 24 | 1.7 | 735 | 3 | US-08-950-720A-5   | Sequence 5, Appl1  |
| 161 | 24 | 1.7 | 216    | 1 | US-09-238-710-17   | Sequence 34, Appl  | 240 | 24 | 1.7 | 779 | 1 | US-08-447-570-22   | Sequence 22, Appl1 |
| 162 | 24 | 1.7 | 216    | 1 | US-08-686-878A-34  | Sequence 34, Appl  | 241 | 24 | 1.7 | 779 | 2 | US-08-449-700-22   | Sequence 22, Appl1 |
| 163 | 24 | 1.7 | 216    | 4 | US-09-175-928-34   | Sequence 34, Appl  | 242 | 24 | 1.7 | 779 | 2 | US-08-449-699A-22  | Sequence 22, Appl1 |
| 164 | 24 | 1.7 | 229    | 4 | US-09-702-705-195  | Sequence 195, App  | 243 | 24 | 1.7 | 779 | 4 | US-09-148-925C-22  | Sequence 22, Appl1 |
| 165 | 24 | 1.7 | 229    | 4 | US-09-736-457-195  | Sequence 195, App  | 244 | 24 | 1.7 | 779 | 4 | US-08-957-425-22   | Sequence 22, Appl1 |
| 166 | 24 | 1.7 | 240    | 1 | US-08-628-417-6    | Sequence 6, Appl1  | 245 | 24 | 1.7 | 780 | 4 | US-09-328-475C-153 | Sequence 153, App  |
| 167 | 24 | 1.7 | 255    | 3 | US-09-480-921B-26  | Sequence 26, Appl  | 246 | 24 | 1.7 | 790 | 3 | US-09-363-970-4    | Sequence 4, Appl1  |
| 168 | 24 | 1.7 | 256    | 3 | US-09-385-982-187  | Sequence 187, App  |     |    |     |     |   |                    |                    |
| 169 | 24 | 1.7 | 256    | 3 | US-09-385-982-187  | Sequence 187, App  |     |    |     |     |   |                    |                    |
| 170 | 24 | 1.7 | 277    | 1 | US-08-244-113-18   | Sequence 18, Appl  |     |    |     |     |   |                    |                    |
| 171 | 24 | 1.7 | 288    | 1 | US-08-648-496-1    | Sequence 1, Appl1  |     |    |     |     |   |                    |                    |
| 172 | 24 | 1.7 | 314    | 3 | US-09-277-016-37   | Sequence 37, Appl  |     |    |     |     |   |                    |                    |
| 173 | 24 | 1.7 | 314    | 4 | US-09-883-548-7    | Sequence 7, Appl1  |     |    |     |     |   |                    |                    |

|     |    |     |      |   |                   |                     |     |    |     |      |   |                    |                     |
|-----|----|-----|------|---|-------------------|---------------------|-----|----|-----|------|---|--------------------|---------------------|
| 247 | 24 | 1.7 | 807  | 2 | US-08-531-927B-9  | Sequence 9, Appl1   | 320 | 24 | 1.7 | 1265 | 1 | US-08-712-702A-5   | Sequence 5, Appl1   |
| 248 | 24 | 1.7 | 812  | 4 | US-09-091-097-7   | Sequence 7, Appl1   | 321 | 24 | 1.7 | 1279 | 3 | US-09-277-716-31   | Sequence 31, Appl1  |
| 249 | 24 | 1.7 | 818  | 4 | US-09-366-887A-15 | Sequence 15, Appl1  | 322 | 24 | 1.7 | 1279 | 3 | US-09-609-161B-31  | Sequence 31, Appl1  |
| 250 | 24 | 1.7 | 819  | 4 | US-09-288-143-18  | Sequence 18, Appl1  | 323 | 24 | 1.7 | 1283 | 3 | US-09-282-305-11   | Sequence 11, Appl1  |
| 251 | 24 | 1.7 | 826  | 4 | US-09-227-357-102 | Sequence 102, Appl1 | 324 | 24 | 1.7 | 1283 | 3 | US-09-883-720-11   | Sequence 11, Appl1  |
| 252 | 24 | 1.7 | 830  | 4 | US-09-227-357-64  | Sequence 64, Appl1  | 325 | 24 | 1.7 | 1281 | 4 | US-09-904-615-17   | Sequence 17, Appl1  |
| 253 | 24 | 1.7 | 830  | 4 | US-09-227-357-147 | Sequence 147, Appl1 | 326 | 24 | 1.7 | 1292 | 4 | US-09-904-615-61   | Sequence 61, Appl1  |
| 254 | 24 | 1.7 | 831  | 4 | US-09-904-615-25  | Sequence 25, Appl1  | 327 | 24 | 1.7 | 1310 | 4 | US-09-690-454-12   | Sequence 12, Appl1  |
| 255 | 24 | 1.7 | 836  | 3 | US-09-352-990-7   | Sequence 160, Appl1 | 328 | 24 | 1.7 | 1315 | 3 | US-09-164-193-1    | Sequence 1, Appl1   |
| 256 | 24 | 1.7 | 848  | 4 | US-09-370-838-160 | Sequence 39, Appl1  | 329 | 24 | 1.7 | 1315 | 4 | US-09-321-448A-1   | Sequence 1, Appl1   |
| 257 | 24 | 1.7 | 851  | 4 | US-09-443-184-39  | Sequence 148, Appl1 | 330 | 24 | 1.7 | 1326 | 2 | US-08-671-320-12   | Sequence 12, Appl1  |
| 258 | 24 | 1.7 | 865  | 4 | US-09-227-357-148 | Sequence 65, Appl1  | 331 | 24 | 1.7 | 1326 | 2 | US-08-868-577-12   | Sequence 12, Appl1  |
| 259 | 24 | 1.7 | 867  | 4 | US-09-227-357-65  | Sequence 5, Appl1   | 332 | 24 | 1.7 | 1326 | 4 | US-09-207-914-12   | Sequence 12, Appl1  |
| 260 | 24 | 1.7 | 902  | 3 | US-08-924-747-5   | Sequence 5, Appl1   | 333 | 24 | 1.7 | 1332 | 2 | US-09-057-762-1    | Sequence 1, Appl1   |
| 261 | 24 | 1.7 | 902  | 3 | US-09-247-373B-5  | Sequence 5, Appl1   | 334 | 24 | 1.7 | 1332 | 4 | US-08-326-119A-1   | Sequence 1, Appl1   |
| 262 | 24 | 1.7 | 902  | 3 | US-09-296-715-5   | Sequence 15, Appl1  | 335 | 24 | 1.7 | 1332 | 4 | US-09-584-568C-1   | Sequence 1, Appl1   |
| 263 | 24 | 1.7 | 903  | 3 | US-08-944-604-15  | Sequence 31, Appl1  | 336 | 24 | 1.7 | 1333 | 4 | US-09-372-422A-9   | Sequence 9, Appl1   |
| 264 | 24 | 1.7 | 931  | 4 | US-09-482-273-31  | Sequence 3, Appl1   | 337 | 24 | 1.7 | 1350 | 4 | US-09-149-476-248  | Sequence 248, Appl1 |
| 265 | 24 | 1.7 | 940  | 2 | US-08-713-000-3   | Sequence 3, Appl1   | 338 | 24 | 1.7 | 1355 | 4 | US-09-599-360B-64  | Sequence 64, Appl1  |
| 266 | 24 | 1.7 | 940  | 2 | US-08-975-316-3   | Sequence 3, Appl1   | 339 | 24 | 1.7 | 1361 | 4 | US-09-489-847-64   | Sequence 64, Appl1  |
| 267 | 24 | 1.7 | 940  | 2 | US-09-211-710-3   | Sequence 3, Appl1   | 340 | 24 | 1.7 | 1365 | 4 | US-09-496-005-2    | Sequence 2, Appl1   |
| 268 | 24 | 1.7 | 940  | 3 | US-09-615-192A-3  | Sequence 122, Appl1 | 341 | 24 | 1.7 | 1369 | 4 | US-09-205-258-174  | Sequence 174, Appl1 |
| 269 | 24 | 1.7 | 944  | 4 | US-09-227-357-122 | Sequence 11, Appl1  | 342 | 24 | 1.7 | 1373 | 3 | US-08-725-758A-1   | Sequence 1, Appl1   |
| 270 | 24 | 1.7 | 955  | 4 | US-09-641-638-11  | Sequence 12, Appl1  | 343 | 24 | 1.7 | 1374 | 4 | US-08-123-761A-2   | Sequence 2, Appl1   |
| 271 | 24 | 1.7 | 955  | 4 | US-09-641-638-12  | Sequence 12, Appl1  | 344 | 24 | 1.7 | 1375 | 4 | US-09-372-422A-37  | Sequence 37, Appl1  |
| 272 | 24 | 1.7 | 957  | 4 | US-09-328-475C-12 | Sequence 12, Appl1  | 345 | 24 | 1.7 | 1375 | 4 | US-09-489-847-120  | Sequence 120, Appl1 |
| 273 | 24 | 1.7 | 965  | 4 | US-09-220-132-154 | Sequence 154, Appl1 | 346 | 24 | 1.7 | 1376 | 4 | US-09-489-847-66   | Sequence 66, Appl1  |
| 274 | 24 | 1.7 | 991  | 4 | US-09-369-247-52  | Sequence 52, Appl1  | 347 | 24 | 1.7 | 1389 | 4 | US-09-227-357-142  | Sequence 142, Appl1 |
| 275 | 24 | 1.7 | 994  | 4 | US-09-205-358-122 | Sequence 12, Appl1  | 348 | 24 | 1.7 | 1389 | 4 | US-09-122-315C-9   | Sequence 9, Appl1   |
| 276 | 24 | 1.7 | 1001 | 1 | US-08-728-259A-10 | Sequence 10, Appl1  | 349 | 24 | 1.7 | 1389 | 4 | US-09-360-376-9    | Sequence 9, Appl1   |
| 277 | 24 | 1.7 | 1001 | 2 | US-08-473-486-10  | Sequence 10, Appl1  | 350 | 24 | 1.7 | 1400 | 4 | US-09-245-281-40   | Sequence 40, Appl1  |
| 278 | 24 | 1.7 | 1001 | 4 | US-09-641-638-360 | Sequence 360, Appl1 | 351 | 24 | 1.7 | 1400 | 4 | US-09-207-359B-40  | Sequence 40, Appl1  |
| 279 | 24 | 1.7 | 1001 | 4 | US-09-641-638-361 | Sequence 361, Appl1 | 352 | 24 | 1.7 | 1400 | 4 | US-09-340-620A-40  | Sequence 40, Appl1  |
| 280 | 24 | 1.7 | 1001 | 4 | US-09-641-638-362 | Sequence 362, Appl1 | 353 | 24 | 1.7 | 1411 | 3 | US-08-964-127-5    | Sequence 5, Appl1   |
| 281 | 24 | 1.7 | 1001 | 4 | US-09-671-317-28  | Sequence 28, Appl1  | 354 | 24 | 1.7 | 1411 | 4 | US-09-496-692-5    | Sequence 5, Appl1   |
| 282 | 24 | 1.7 | 1001 | 4 | US-09-671-317-230 | Sequence 230, Appl1 | 355 | 24 | 1.7 | 1411 | 4 | US-09-904-615-38   | Sequence 38, Appl1  |
| 283 | 24 | 1.7 | 1001 | 4 | US-09-671-317-231 | Sequence 231, Appl1 | 356 | 24 | 1.7 | 1411 | 4 | US-10-000-273-5    | Sequence 5, Appl1   |
| 284 | 24 | 1.7 | 1001 | 4 | US-09-671-317-269 | Sequence 269, Appl1 | 357 | 24 | 1.7 | 1416 | 4 | US-09-205-258-98   | Sequence 98, Appl1  |
| 285 | 24 | 1.7 | 1013 | 1 | US-07-920-519-30  | Sequence 30, Appl1  | 358 | 24 | 1.7 | 1428 | 3 | US-09-118-442-5    | Sequence 5, Appl1   |
| 286 | 24 | 1.7 | 1013 | 1 | US-08-086-410-23  | Sequence 23, Appl1  | 359 | 24 | 1.7 | 1428 | 3 | US-09-677-064-5    | Sequence 5, Appl1   |
| 287 | 24 | 1.7 | 1013 | 1 | US-08-314-586-30  | Sequence 30, Appl1  | 360 | 24 | 1.7 | 1454 | 4 | US-09-372-422A-19  | Sequence 19, Appl1  |
| 288 | 24 | 1.7 | 1021 | 4 | US-09-461-325-92  | Sequence 92, Appl1  | 361 | 24 | 1.7 | 1458 | 4 | US-09-482-273-14   | Sequence 14, Appl1  |
| 289 | 24 | 1.7 | 1023 | 4 | US-09-229-947-38  | Sequence 38, Appl1  | 362 | 24 | 1.7 | 1461 | 3 | US-08-722-126A-4   | Sequence 4, Appl1   |
| 290 | 24 | 1.7 | 1024 | 4 | US-09-328-475C-22 | Sequence 22, Appl1  | 363 | 24 | 1.7 | 1461 | 5 | PCT-US95-04258-4   | Sequence 4, Appl1   |
| 291 | 24 | 1.7 | 1024 | 4 | US-09-328-475C-26 | Sequence 26, Appl1  | 364 | 24 | 1.7 | 1465 | 4 | US-09-573-906-1    | Sequence 1, Appl1   |
| 292 | 24 | 1.7 | 1027 | 4 | US-09-674-741-9   | Sequence 9, Appl1   | 365 | 24 | 1.7 | 1485 | 4 | US-09-372-422A-39  | Sequence 39, Appl1  |
| 293 | 24 | 1.7 | 1032 | 4 | US-09-257-179-21  | Sequence 21, Appl1  | 366 | 24 | 1.7 | 1487 | 4 | US-09-461-325-109  | Sequence 109, Appl1 |
| 294 | 24 | 1.7 | 1040 | 4 | US-08-978-289-5   | Sequence 5, Appl1   | 367 | 24 | 1.7 | 1502 | 2 | US-08-651-940-1    | Sequence 1, Appl1   |
| 295 | 24 | 1.7 | 1042 | 4 | US-08-978-289-7   | Sequence 7, Appl1   | 368 | 24 | 1.7 | 1502 | 2 | US-09-295-020-1    | Sequence 1, Appl1   |
| 296 | 24 | 1.7 | 1048 | 4 | US-09-489-847-38  | Sequence 38, Appl1  | 369 | 24 | 1.7 | 1505 | 2 | US-08-909-965C-13  | Sequence 13, Appl1  |
| 297 | 24 | 1.7 | 1051 | 3 | US-09-245-041-10  | Sequence 10, Appl1  | 370 | 24 | 1.7 | 1508 | 4 | US-09-039-046-1    | Sequence 1, Appl1   |
| 298 | 24 | 1.7 | 1053 | 4 | US-09-257-179-31  | Sequence 31, Appl1  | 371 | 24 | 1.7 | 1537 | 4 | US-09-149-476-311  | Sequence 311, Appl1 |
| 299 | 24 | 1.7 | 1069 | 4 | US-09-372-422A-7  | Sequence 7, Appl1   | 372 | 24 | 1.7 | 1539 | 4 | US-09-461-325-50   | Sequence 50, Appl1  |
| 300 | 24 | 1.7 | 1071 | 4 | US-09-205-258-118 | Sequence 118, Appl1 | 373 | 24 | 1.7 | 1540 | 3 | US-08-977-001-2    | Sequence 2, Appl1   |
| 301 | 24 | 1.7 | 1076 | 4 | US-08-705-477E-98 | Sequence 98, Appl1  | 374 | 24 | 1.7 | 1578 | 3 | US-09-416-050A-1   | Sequence 1, Appl1   |
| 302 | 24 | 1.7 | 1096 | 3 | US-09-461-697-26  | Sequence 26, Appl1  | 375 | 24 | 1.7 | 1578 | 3 | US-09-664-800-1    | Sequence 1, Appl1   |
| 303 | 24 | 1.7 | 1100 | 4 | US-09-372-422A-47 | Sequence 47, Appl1  | 376 | 24 | 1.7 | 1578 | 3 | US-09-665-309-1    | Sequence 1, Appl1   |
| 304 | 24 | 1.7 | 1105 | 2 | US-08-394-152A-46 | Sequence 46, Appl1  | 377 | 24 | 1.7 | 1578 | 3 | US-09-661-569-1    | Sequence 1, Appl1   |
| 305 | 24 | 1.7 | 1106 | 3 | US-09-362-318-1   | Sequence 1, Appl1   | 378 | 24 | 1.7 | 1599 | 1 | US-08-143-219-27   | Sequence 27, Appl1  |
| 306 | 24 | 1.7 | 1118 | 4 | US-09-522-714-23  | Sequence 23, Appl1  | 379 | 24 | 1.7 | 1620 | 3 | US-08-985-950-11   | Sequence 11, Appl1  |
| 307 | 24 | 1.7 | 1132 | 3 | US-08-894-731-3   | Sequence 3, Appl1   | 380 | 24 | 1.7 | 1620 | 4 | US-09-546-049-11   | Sequence 11, Appl1  |
| 308 | 24 | 1.7 | 1139 | 4 | US-09-248-335-27  | Sequence 27, Appl1  | 381 | 24 | 1.7 | 1624 | 2 | US-08-852-807-10   | Sequence 10, Appl1  |
| 309 | 24 | 1.7 | 1149 | 4 | US-09-237-357-84  | Sequence 84, Appl1  | 382 | 24 | 1.7 | 1631 | 4 | US-09-051-239A-1   | Sequence 1, Appl1   |
| 310 | 24 | 1.7 | 1153 | 4 | US-09-372-458A-5  | Sequence 5, Appl1   | 383 | 24 | 1.7 | 1651 | 4 | US-09-665-538-49   | Sequence 49, Appl1  |
| 311 | 24 | 1.7 | 1166 | 5 | PCT-US96-12129B-1 | Sequence 23, Appl1  | 384 | 24 | 1.7 | 1653 | 4 | US-09-320-132-172  | Sequence 172, Appl1 |
| 312 | 24 | 1.7 | 1193 | 4 | US-09-399-588-3   | Sequence 3, Appl1   | 385 | 24 | 1.7 | 1659 | 1 | US-08-333-358-7    | Sequence 7, Appl1   |
| 313 | 24 | 1.7 | 1196 | 4 | US-09-372-422A-23 | Sequence 23, Appl1  | 386 | 24 | 1.7 | 1659 | 1 | US-08-463-694-7    | Sequence 7, Appl1   |
| 314 | 24 | 1.7 | 1230 | 4 | US-09-248-335-27  | Sequence 27, Appl1  | 387 | 24 | 1.7 | 1659 | 1 | US-08-694-501-7    | Sequence 7, Appl1   |
| 315 | 24 | 1.7 | 1238 | 4 | US-09-461-325-80  | Sequence 80, Appl1  | 388 | 24 | 1.7 | 1659 | 4 | US-09-615-192A-124 | Sequence 124, Appl1 |
| 316 | 24 | 1.7 | 1243 | 1 | US-09-369-247-50  | Sequence 50, Appl1  | 389 | 24 | 1.7 | 1661 | 4 | US-09-436-521A-1   | Sequence 1, Appl1   |
| 317 | 24 | 1.7 | 1245 | 3 | US-08-178-606-1   | Sequence 15, Appl1  | 390 | 24 | 1.7 | 1661 | 4 | US-09-464-535-43   | Sequence 43, Appl1  |
| 318 | 24 | 1.7 | 1245 | 4 | US-09-282-305-15  | Sequence 15, Appl1  | 391 | 24 | 1.7 | 1664 | 1 | US-07-863-169A-6   | Sequence 6, Appl1   |
| 319 | 24 | 1.7 | 1265 | 1 | US-08-182-060A-5  | Sequence 5, Appl1   | 392 | 24 | 1.7 | 1664 | 1 | US-08-250-740-34   | Sequence 34, Appl1  |

|       |    |     |      |   |                    |                    |       |    |     |      |   |                   |                    |
|-------|----|-----|------|---|--------------------|--------------------|-------|----|-----|------|---|-------------------|--------------------|
| C 393 | 24 | 1.7 | 1664 | 1 | US-07-695-472B-3   | Sequence 3, Appl1  | 466   | 24 | 1.7 | 2047 | 4 | US-09-832-312-1   | Sequence 1, Appl1  |
| 394   | 24 | 1.7 | 1664 | 2 | US-08-429-964-6    | Sequence 6, Appl1  | C 467 | 24 | 1.7 | 2048 | 1 | US-07-602-608-11  | Sequence 11, Appl1 |
| 395   | 24 | 1.7 | 1664 | 3 | US-07-935-087-6    | Sequence 6, Appl1  | 468   | 24 | 1.7 | 2048 | 1 | US-08-261-578-11  | Sequence 11, Appl1 |
| C 396 | 24 | 1.7 | 1664 | 4 | US-09-106-375-3    | Sequence 3, Appl1  | C 469 | 24 | 1.7 | 2073 | 4 | US-09-173-300-3   | Sequence 3, Appl1  |
| 397   | 24 | 1.7 | 1670 | 5 | PCT-US93-08062-6   | Sequence 6, Appl1  | 470   | 24 | 1.7 | 2084 | 4 | US-09-205-258-234 | Sequence 234, App  |
| C 398 | 24 | 1.7 | 1670 | 3 | US-08-709-838-1    | Sequence 1, Appl1  | 471   | 24 | 1.7 | 2098 | 4 | US-09-489-847-20  | Sequence 20, Appl1 |
| C 399 | 24 | 1.7 | 1670 | 3 | US-08-829-839-1    | Sequence 1, Appl1  | 472   | 24 | 1.7 | 2101 | 4 | US-08-190-204-1   | Sequence 1, Appl1  |
| C 400 | 24 | 1.7 | 1674 | 4 | US-09-482-273-78   | Sequence 78, Appl1 | 473   | 24 | 1.7 | 2119 | 2 | US-08-381-691-17  | Sequence 17, Appl1 |
| C 401 | 24 | 1.7 | 1681 | 4 | US-09-461-325-115  | Sequence 115, App  | 474   | 24 | 1.7 | 2126 | 3 | US-09-237-543-1   | Sequence 1, Appl1  |
| C 402 | 24 | 1.7 | 1689 | 4 | US-09-053-374A-4   | Sequence 4, Appl1  | 475   | 24 | 1.7 | 2126 | 4 | US-09-644-450-1   | Sequence 1, Appl1  |
| 403   | 24 | 1.7 | 1693 | 6 | 5169835-3          | Patent No. 5169835 | 476   | 24 | 1.7 | 2202 | 4 | US-09-396-149-3   | Sequence 3, Appl1  |
| 404   | 24 | 1.7 | 1697 | 4 | US-09-345-473E-7   | Sequence 7, Appl1  | 477   | 24 | 1.7 | 2203 | 4 | US-09-801-861-1   | Sequence 1, Appl1  |
| 405   | 24 | 1.7 | 1700 | 2 | US-08-897-340-4    | Sequence 4, Appl1  | 478   | 24 | 1.7 | 2205 | 3 | US-08-888-077A-41 | Sequence 41, Appl1 |
| 406   | 24 | 1.7 | 1700 | 3 | US-09-252-329-4    | Sequence 4, Appl1  | 479   | 24 | 1.7 | 2217 | 3 | US-09-244-314-1   | Sequence 1, Appl1  |
| 407   | 24 | 1.7 | 1702 | 3 | US-09-413-574-3    | Sequence 3, Appl1  | 480   | 24 | 1.7 | 2217 | 4 | US-09-498-959-1   | Sequence 1, Appl1  |
| 408   | 24 | 1.7 | 1708 | 4 | US-09-461-325-108  | Sequence 108, App  | 481   | 24 | 1.7 | 2218 | 2 | US-08-985-090-4   | Sequence 4, Appl1  |
| 409   | 24 | 1.7 | 1722 | 4 | US-09-482-273-102  | Sequence 102, App  | 482   | 24 | 1.7 | 2218 | 3 | US-09-165-543-31  | Sequence 31, Appl1 |
| 410   | 24 | 1.7 | 1723 | 4 | US-09-461-325-98   | Sequence 98, Appl1 | 483   | 24 | 1.7 | 2222 | 3 | US-09-197-380-1   | Sequence 1, Appl1  |
| 411   | 24 | 1.7 | 1728 | 3 | US-08-985-950-7    | Sequence 7, Appl1  | 484   | 24 | 1.7 | 2235 | 4 | US-09-569-804-20  | Sequence 20, Appl1 |
| 412   | 24 | 1.7 | 1733 | 4 | US-09-546-049-7    | Sequence 7, Appl1  | 485   | 24 | 1.7 | 2235 | 4 | US-09-581-831-1   | Sequence 1, Appl1  |
| 413   | 24 | 1.7 | 1733 | 3 | US-09-073-569-1    | Sequence 1, Appl1  | 486   | 24 | 1.7 | 2241 | 4 | US-09-023-942A-9  | Sequence 9, Appl1  |
| 414   | 24 | 1.7 | 1734 | 4 | US-08-630-915A-23  | Sequence 23, Appl1 | 487   | 24 | 1.7 | 2242 | 4 | US-09-482-273-35  | Sequence 35, Appl1 |
| 415   | 24 | 1.7 | 1753 | 4 | US-09-149-476-56   | Sequence 56, Appl1 | 488   | 24 | 1.7 | 2271 | 4 | US-09-205-258-243 | Sequence 243, App  |
| 416   | 24 | 1.7 | 1776 | 2 | US-08-531-927B-1   | Sequence 1, Appl1  | 489   | 24 | 1.7 | 2274 | 4 | US-09-388-743-17  | Sequence 17, Appl1 |
| 417   | 24 | 1.7 | 1776 | 3 | US-09-041-886-12   | Sequence 12, Appl1 | 490   | 24 | 1.7 | 2276 | 4 | US-09-205-258-183 | Sequence 183, App  |
| 418   | 24 | 1.7 | 1776 | 4 | US-09-149-476-59   | Sequence 59, Appl1 | 491   | 24 | 1.7 | 2295 | 2 | US-08-842-842-6   | Sequence 6, Appl1  |
| 419   | 24 | 1.7 | 1785 | 2 | US-08-975-316-48   | Sequence 48, Appl1 | 492   | 24 | 1.7 | 2295 | 4 | US-09-052-521C-1  | Sequence 1, Appl1  |
| 420   | 24 | 1.7 | 1785 | 4 | US-09-615-192A-48  | Sequence 48, Appl1 | 493   | 24 | 1.7 | 2306 | 1 | US-08-484-105-9   | Sequence 9, Appl1  |
| 421   | 24 | 1.7 | 1787 | 4 | US-09-461-325-35   | Sequence 35, Appl1 | 494   | 24 | 1.7 | 2306 | 1 | US-08-484-105-9   | Sequence 9, Appl1  |
| 422   | 24 | 1.7 | 1796 | 4 | US-09-470-175-1    | Sequence 1, Appl1  | 495   | 24 | 1.7 | 2311 | 4 | US-09-624-693A-14 | Sequence 14, Appl1 |
| 423   | 24 | 1.7 | 1799 | 3 | US-09-329-633A-1   | Sequence 1, Appl1  | 496   | 24 | 1.7 | 2338 | 3 | US-09-332-200-66  | Sequence 66, Appl1 |
| 424   | 24 | 1.7 | 1799 | 4 | US-09-079-029-2    | Sequence 2, Appl1  | 497   | 24 | 1.7 | 2338 | 4 | US-09-232-197-66  | Sequence 66, Appl1 |
| 425   | 24 | 1.7 | 1810 | 5 | PCT-US94-12883-3   | Sequence 11, Appl1 | 498   | 24 | 1.7 | 2338 | 4 | US-09-332-201-66  | Sequence 66, Appl1 |
| 426   | 24 | 1.7 | 1813 | 5 | PCT-US94-12883-3   | Sequence 75, Appl1 | 499   | 24 | 1.7 | 2343 | 2 | US-09-031-392-1   | Sequence 1, Appl1  |
| 427   | 24 | 1.7 | 1825 | 3 | US-09-461-697-75   | Sequence 75, Appl1 | 500   | 24 | 1.7 | 2343 | 3 | US-09-299-549-1   | Sequence 1, Appl1  |
| 428   | 24 | 1.7 | 1831 | 4 | US-09-336-536-15   | Sequence 15, Appl1 | 501   | 24 | 1.7 | 2343 | 4 | US-09-610-417-1   | Sequence 1, Appl1  |
| 429   | 24 | 1.7 | 1858 | 4 | US-09-336-536-56   | Sequence 56, Appl1 | 502   | 24 | 1.7 | 2367 | 1 | US-08-441-139-3   | Sequence 3, Appl1  |
| 430   | 24 | 1.7 | 1880 | 4 | US-09-564-808-1    | Sequence 1, Appl1  | 503   | 24 | 1.7 | 2378 | 4 | US-08-802-805D-20 | Sequence 20, Appl1 |
| 431   | 24 | 1.7 | 1895 | 2 | US-08-592-541-165  | Sequence 165, App  | 504   | 24 | 1.7 | 2405 | 1 | US-08-860-370-1   | Sequence 1, Appl1  |
| 432   | 24 | 1.7 | 1895 | 2 | US-08-592-541-165  | Sequence 165, App  | 505   | 24 | 1.7 | 2405 | 1 | US-08-860-370-1   | Sequence 30, Appl1 |
| 433   | 24 | 1.7 | 1895 | 3 | US-08-888-077A-20  | Sequence 20, Appl1 | 506   | 24 | 1.7 | 2405 | 3 | US-08-185-359-30  | Sequence 30, Appl1 |
| 434   | 24 | 1.7 | 1895 | 3 | US-09-124-698-165  | Sequence 165, App  | 507   | 24 | 1.7 | 2449 | 3 | US-09-149-476-241 | Sequence 241, App  |
| 435   | 24 | 1.7 | 1895 | 3 | US-09-127-480-165  | Sequence 165, App  | 508   | 24 | 1.7 | 2454 | 3 | US-09-221-235-7   | Sequence 7, Appl1  |
| 436   | 24 | 1.7 | 1895 | 4 | US-09-124-523-165  | Sequence 165, App  | 509   | 24 | 1.7 | 2454 | 3 | US-09-221-528-7   | Sequence 7, Appl1  |
| 437   | 24 | 1.7 | 1895 | 4 | US-09-636-796A-165 | Sequence 165, App  | 510   | 24 | 1.7 | 2454 | 3 | US-09-221-527-7   | Sequence 7, Appl1  |
| 438   | 24 | 1.7 | 1898 | 1 | US-08-342-411A-1   | Sequence 1, Appl1  | 511   | 24 | 1.7 | 2454 | 3 | US-09-221-236-7   | Sequence 7, Appl1  |
| 439   | 24 | 1.7 | 1902 | 4 | US-09-620-312D-862 | Sequence 862, App  | 512   | 24 | 1.7 | 2454 | 3 | US-09-221-416-7   | Sequence 7, Appl1  |
| 440   | 24 | 1.7 | 1907 | 4 | US-09-205-258-108  | Sequence 108, App  | 513   | 24 | 1.7 | 2454 | 3 | US-09-221-245-7   | Sequence 7, Appl1  |
| 441   | 24 | 1.7 | 1910 | 4 | US-09-517-467B-7   | Sequence 7, Appl1  | 514   | 24 | 1.7 | 2454 | 3 | US-09-163-115-7   | Sequence 7, Appl1  |
| 442   | 24 | 1.7 | 1926 | 3 | US-08-836-567-5    | Sequence 5, Appl1  | 515   | 24 | 1.7 | 2454 | 3 | US-09-221-528-7   | Sequence 7, Appl1  |
| 443   | 24 | 1.7 | 1926 | 4 | US-09-606-304-5    | Sequence 5, Appl1  | 516   | 24 | 1.7 | 2454 | 3 | US-09-593-553-7   | Sequence 7, Appl1  |
| 444   | 24 | 1.7 | 1930 | 4 | US-08-987-367-1    | Sequence 1, Appl1  | 517   | 24 | 1.7 | 2454 | 3 | US-09-321-237-7   | Sequence 7, Appl1  |
| 445   | 24 | 1.7 | 1949 | 4 | US-09-461-325-56   | Sequence 26, Appl1 | 518   | 24 | 1.7 | 2460 | 3 | US-08-964-127-1   | Sequence 1, Appl1  |
| 446   | 24 | 1.7 | 1964 | 1 | US-08-132-168A-31  | Sequence 31, Appl1 | 519   | 24 | 1.7 | 2460 | 4 | US-09-496-692-1   | Sequence 1, Appl1  |
| 447   | 24 | 1.7 | 1964 | 3 | US-08-468-856B-7   | Sequence 7, Appl1  | 520   | 24 | 1.7 | 2460 | 4 | US-10-000-273-1   | Sequence 43, Appl1 |
| 448   | 24 | 1.7 | 1964 | 3 | US-08-468-859A-7   | Sequence 7, Appl1  | 521   | 24 | 1.7 | 2460 | 4 | US-09-118-408-43  | Sequence 43, Appl1 |
| 449   | 24 | 1.7 | 1969 | 1 | US-07-937-609-28   | Sequence 28, Appl1 | 522   | 24 | 1.7 | 2559 | 4 | US-09-506-855-43  | Sequence 43, Appl1 |
| 450   | 24 | 1.7 | 1969 | 3 | US-08-029-170-88   | Sequence 88, Appl1 | 523   | 24 | 1.7 | 2559 | 4 | US-09-619-740-43  | Sequence 43, Appl1 |
| 451   | 24 | 1.7 | 1977 | 3 | US-09-227-357-83   | Sequence 83, Appl1 | 524   | 24 | 1.7 | 2559 | 4 | US-09-506-852-43  | Sequence 43, Appl1 |
| 452   | 24 | 1.7 | 1979 | 4 | US-09-461-325-10   | Sequence 30, Appl1 | 525   | 24 | 1.7 | 2561 | 2 | US-09-013-634-1   | Sequence 1, Appl1  |
| 453   | 24 | 1.7 | 2000 | 4 | US-09-439-313-374  | Sequence 374, App  | 526   | 24 | 1.7 | 2561 | 4 | US-09-369-247-51  | Sequence 51, Appl1 |
| 454   | 24 | 1.7 | 2000 | 4 | US-09-352-616A-374 | Sequence 374, App  | 527   | 24 | 1.7 | 2562 | 4 | US-08-557-006C-39 | Sequence 39, Appl1 |
| 455   | 24 | 1.7 | 2000 | 4 | US-09-289-198-302  | Sequence 302, App  | 528   | 24 | 1.7 | 2562 | 4 | US-08-557-006C-39 | Sequence 39, Appl1 |
| 456   | 24 | 1.7 | 2006 | 4 | US-09-489-847-58   | Sequence 28, Appl1 | 529   | 24 | 1.7 | 2658 | 2 | US-08-592-383-3   | Sequence 7, Appl1  |
| 457   | 24 | 1.7 | 2013 | 4 | US-09-596-196-3    | Sequence 3, Appl1  | 530   | 24 | 1.7 | 2676 | 1 | US-08-471-570-7   | Sequence 7, Appl1  |
| 458   | 24 | 1.7 | 2024 | 4 | US-09-149-476-83   | Sequence 83, Appl1 | 531   | 24 | 1.7 | 2687 | 4 | US-09-489-847-57  | Sequence 57, Appl1 |
| 459   | 24 | 1.7 | 2026 | 3 | US-08-993-228-3    | Sequence 3, Appl1  | 532   | 24 | 1.7 | 2719 | 3 | US-08-706-216-1   | Sequence 24, Appl1 |
| 460   | 24 | 1.7 | 2030 | 3 | US-08-706-216-3    | Sequence 3, Appl1  | C 533 | 24 | 1.7 | 2751 | 3 | US-08-557-006C-24 | Sequence 24, Appl1 |
| 461   | 24 | 1.7 | 2040 | 4 | US-09-439-313-375  | Sequence 375, App  | 534   | 24 | 1.7 | 2780 | 4 | US-09-489-847-87  | Sequence 87, Appl1 |
| 462   | 24 | 1.7 | 2040 | 4 | US-09-352-616A-375 | Sequence 375, App  | 535   | 24 | 1.7 | 2793 | 3 | US-08-836-567-7   | Sequence 7, Appl1  |
| 463   | 24 | 1.7 | 2047 | 4 | US-09-289-198-303  | Sequence 303, App  | 536   | 24 | 1.7 | 2793 | 4 | US-09-606-304-7   | Sequence 7, Appl1  |
| 464   | 24 | 1.7 | 2047 | 3 | US-09-345-468-1    | Sequence 1, Appl1  | 537   | 24 | 1.7 | 2852 | 4 | US-09-027-137-2   | Sequence 2, Appl1  |
| 465   | 24 | 1.7 | 2047 | 4 | US-09-414-453A-1   | Sequence 1, Appl1  | 538   | 24 | 1.7 | 2852 | 3 | US-09-063-950-1   | Sequence 1, Appl1  |

|     |    |     |      |   |                    |                    |     |    |     |        |   |                   |                    |
|-----|----|-----|------|---|--------------------|--------------------|-----|----|-----|--------|---|-------------------|--------------------|
| 539 | 24 | 1.7 | 2852 | 4 | US-09-344-441-2    | Sequence 2, Appl1  | 612 | 24 | 1.7 | 6028   | 4 | US-09-362-336A-3  | Sequence 3, Appl1  |
| 540 | 24 | 1.7 | 2932 | 3 | US-08-999-774A-5   | Sequence 5, Appl1  | 613 | 24 | 1.7 | 6409   | 4 | US-09-967-908A-1  | Sequence 1, Appl1  |
| 541 | 24 | 1.7 | 2940 | 2 | US-08-592-383-1    | Sequence 1, Appl1  | 614 | 24 | 1.7 | 7970   | 4 | US-09-193-707-6   | Sequence 6, Appl1  |
| 542 | 24 | 1.7 | 2940 | 4 | US-09-773-426A-6   | Sequence 6, Appl1  | 615 | 24 | 1.7 | 8083   | 3 | US-09-383-630-4   | Sequence 4, Appl1  |
| 543 | 24 | 1.7 | 2940 | 6 | 5171671-1          | Patent No. 5171671 | 616 | 24 | 1.7 | 8083   | 3 | US-09-383-630-5   | Sequence 5, Appl1  |
| 544 | 24 | 1.7 | 3001 | 4 | US-09-539-3330-187 | Sequence 187, App  | 617 | 24 | 1.7 | 9278   | 1 | US-08-243-542-9   | Sequence 9, Appl1  |
| 545 | 24 | 1.7 | 3073 | 4 | US-09-620-3120-279 | Sequence 279, App  | 618 | 24 | 1.7 | 9278   | 1 | US-08-477-407-9   | Sequence 9, Appl1  |
| 546 | 24 | 1.7 | 3227 | 3 | US-08-372-892-3    | Sequence 3, Appl1  | 619 | 24 | 1.7 | 9278   | 1 | US-08-484-355-9   | Sequence 9, Appl1  |
| 547 | 24 | 1.7 | 3244 | 3 | US-09-165-543-4    | Sequence 4, Appl1  | 620 | 24 | 1.7 | 9521   | 4 | US-08-972-218-2   | Sequence 2, Appl1  |
| 548 | 24 | 1.7 | 3252 | 3 | US-09-118-442-1    | Sequence 1, Appl1  | 621 | 24 | 1.7 | 9521   | 4 | US-09-193-707-2   | Sequence 2, Appl1  |
| 549 | 24 | 1.7 | 3252 | 3 | US-09-677-064-1    | Sequence 1, Appl1  | 622 | 24 | 1.7 | 9551   | 1 | US-08-056-200-93  | Sequence 93, Appl1 |
| 550 | 24 | 1.7 | 3252 | 4 | US-09-604-608-1    | Sequence 1, Appl1  | 623 | 24 | 1.7 | 9551   | 2 | US-08-800-644-93  | Sequence 93, Appl1 |
| 551 | 24 | 1.7 | 3254 | 1 | US-08-372-892-1    | Sequence 1, Appl1  | 624 | 24 | 1.7 | 9589   | 1 | US-07-925-695-1   | Sequence 1, Appl1  |
| 552 | 24 | 1.7 | 3291 | 3 | US-09-318-448-12   | Sequence 12, Appl1 | 625 | 24 | 1.7 | 9589   | 1 | US-07-925-695-2   | Sequence 2, Appl1  |
| 553 | 24 | 1.7 | 3328 | 1 | US-08-159-340A-1   | Sequence 1, Appl1  | 626 | 24 | 1.7 | 9934   | 3 | US-08-977-171-2   | Sequence 2, Appl1  |
| 554 | 24 | 1.7 | 3338 | 4 | US-09-489-847-117  | Sequence 117, App  | 627 | 24 | 1.7 | 9951   | 4 | US-09-193-707-3   | Sequence 3, Appl1  |
| 555 | 24 | 1.7 | 3385 | 1 | US-08-405-392-1    | Sequence 1, Appl1  | 628 | 24 | 1.7 | 10524  | 4 | US-09-193-707-4   | Sequence 4, Appl1  |
| 556 | 24 | 1.7 | 3385 | 3 | US-08-487-691-1    | Sequence 1, Appl1  | 629 | 24 | 1.7 | 11282  | 4 | US-09-733-042-1   | Sequence 1, Appl1  |
| 557 | 24 | 1.7 | 3385 | 3 | US-08-666-221B-3   | Sequence 3, Appl1  | 630 | 24 | 1.7 | 11927  | 4 | US-09-193-707-5   | Sequence 5, Appl1  |
| 558 | 24 | 1.7 | 3385 | 4 | US-08-666-221B-9   | Sequence 9, Appl1  | 631 | 24 | 1.7 | 13574  | 2 | US-08-852-807-1   | Sequence 1, Appl1  |
| 559 | 24 | 1.7 | 3385 | 4 | US-08-189-738A-1   | Sequence 1, Appl1  | 632 | 24 | 1.7 | 13905  | 4 | US-08-972-218-1   | Sequence 1, Appl1  |
| 560 | 24 | 1.7 | 3426 | 1 | US-08-205-018-1    | Sequence 1, Appl1  | 633 | 24 | 1.7 | 13905  | 4 | US-09-193-707-1   | Sequence 1, Appl1  |
| 561 | 24 | 1.7 | 3431 | 4 | US-09-155-078-1    | Sequence 1, Appl1  | 634 | 24 | 1.7 | 21784  | 4 | US-09-820-002-3   | Sequence 3, Appl1  |
| 562 | 24 | 1.7 | 3483 | 4 | US-09-130-491-3    | Sequence 3, Appl1  | 635 | 24 | 1.7 | 32042  | 4 | US-09-245-285-44  | Sequence 44, Appl1 |
| 563 | 24 | 1.7 | 3527 | 2 | US-08-909-965C-7   | Sequence 7, Appl1  | 636 | 24 | 1.7 | 32042  | 4 | US-09-340-620A-63 | Sequence 63, Appl1 |
| 564 | 24 | 1.7 | 3571 | 4 | US-09-564-595D-34  | Sequence 34, Appl1 | 637 | 24 | 1.7 | 35060  | 3 | US-08-814-095-7   | Sequence 7, Appl1  |
| 565 | 24 | 1.7 | 3571 | 4 | US-09-706-968-42   | Sequence 42, Appl1 | 638 | 24 | 1.7 | 35828  | 4 | US-09-449-218D-17 | Sequence 17, Appl1 |
| 566 | 24 | 1.7 | 3573 | 4 | US-09-457-066-42   | Sequence 42, Appl1 | 639 | 24 | 1.7 | 35828  | 4 | US-09-449-218D-17 | Sequence 17, Appl1 |
| 567 | 24 | 1.7 | 3596 | 2 | US-08-779-801-5    | Sequence 5, Appl1  | 640 | 24 | 1.7 | 35828  | 4 | US-09-668-522A-17 | Sequence 17, Appl1 |
| 568 | 24 | 1.7 | 3596 | 4 | US-09-298-441-5    | Sequence 5, Appl1  | 641 | 24 | 1.7 | 35828  | 4 | US-09-668-522A-17 | Sequence 17, Appl1 |
| 569 | 24 | 1.7 | 3632 | 2 | US-08-779-801-3    | Sequence 3, Appl1  | 642 | 24 | 1.7 | 35828  | 4 | US-09-668-037A-17 | Sequence 17, Appl1 |
| 570 | 24 | 1.7 | 3632 | 4 | US-09-298-441-3    | Sequence 3, Appl1  | 643 | 24 | 1.7 | 35828  | 4 | US-09-668-037A-17 | Sequence 17, Appl1 |
| 571 | 24 | 1.7 | 3632 | 4 | US-09-298-441-4    | Sequence 4, Appl1  | 644 | 24 | 1.7 | 36551  | 4 | US-09-738-89A-3   | Sequence 3, Appl1  |
| 572 | 24 | 1.7 | 3632 | 4 | US-09-298-441-4    | Sequence 4, Appl1  | 645 | 24 | 1.7 | 36551  | 4 | US-09-964-463-3   | Sequence 3, Appl1  |
| 573 | 24 | 1.7 | 3635 | 1 | US-08-091-569-1    | Sequence 1, Appl1  | 646 | 24 | 1.7 | 38844  | 4 | US-09-734-675-3   | Sequence 3, Appl1  |
| 574 | 24 | 1.7 | 3695 | 1 | US-08-203-676-1    | Sequence 1, Appl1  | 647 | 24 | 1.7 | 39382  | 4 | US-09-820-924-3   | Sequence 3, Appl1  |
| 575 | 24 | 1.7 | 3695 | 2 | US-08-822-238-1    | Sequence 1, Appl1  | 648 | 24 | 1.7 | 40000  | 4 | US-09-780-037A-18 | Sequence 18, Appl1 |
| 576 | 24 | 1.7 | 3829 | 2 | US-08-631-097-8    | Sequence 8, Appl1  | 649 | 24 | 1.7 | 40328  | 3 | US-08-742-185-102 | Sequence 102, App  |
| 577 | 24 | 1.7 | 3829 | 3 | US-08-810-712-6    | Sequence 6, Appl1  | 650 | 24 | 1.7 | 40352  | 3 | US-08-846-111D-15 | Sequence 15, Appl1 |
| 578 | 24 | 1.7 | 4055 | 4 | US-09-620-312D-706 | Sequence 706, App  | 651 | 24 | 1.7 | 40352  | 4 | US-09-443-077-15  | Sequence 15, Appl1 |
| 579 | 24 | 1.7 | 4137 | 3 | US-09-221-835-1    | Sequence 1, Appl1  | 652 | 24 | 1.7 | 43069  | 4 | US-09-292-542A-1  | Sequence 1, Appl1  |
| 580 | 24 | 1.7 | 4137 | 3 | US-09-221-928-1    | Sequence 1, Appl1  | 653 | 24 | 1.7 | 43069  | 4 | US-09-292-542A-1  | Sequence 1, Appl1  |
| 581 | 24 | 1.7 | 4137 | 3 | US-09-221-527-1    | Sequence 1, Appl1  | 654 | 24 | 1.7 | 43950  | 4 | US-09-735-934A-3  | Sequence 3, Appl1  |
| 582 | 24 | 1.7 | 4137 | 3 | US-09-221-236-1    | Sequence 1, Appl1  | 655 | 24 | 1.7 | 43950  | 4 | US-09-735-934A-3  | Sequence 3, Appl1  |
| 583 | 24 | 1.7 | 4137 | 3 | US-09-221-416-1    | Sequence 1, Appl1  | 656 | 24 | 1.7 | 43950  | 4 | US-10-060-332-3   | Sequence 3, Appl1  |
| 584 | 24 | 1.7 | 4137 | 3 | US-09-221-245-1    | Sequence 1, Appl1  | 657 | 24 | 1.7 | 43950  | 4 | US-10-060-332-3   | Sequence 3, Appl1  |
| 585 | 24 | 1.7 | 4137 | 3 | US-09-163-115-1    | Sequence 1, Appl1  | 658 | 24 | 1.7 | 46718  | 4 | US-09-816-093-3   | Sequence 3, Appl1  |
| 586 | 24 | 1.7 | 4137 | 3 | US-09-221-528-1    | Sequence 1, Appl1  | 659 | 24 | 1.7 | 49312  | 4 | US-09-671-317-485 | Sequence 485, App  |
| 587 | 24 | 1.7 | 4137 | 3 | US-09-593-553-1    | Sequence 1, Appl1  | 660 | 24 | 1.7 | 50000  | 4 | US-09-146-053-3   | Sequence 3, Appl1  |
| 588 | 24 | 1.7 | 4137 | 3 | US-09-321-237-1    | Sequence 1, Appl1  | 661 | 24 | 1.7 | 59065  | 4 | US-09-813-817-3   | Sequence 3, Appl1  |
| 589 | 24 | 1.7 | 4137 | 4 | US-09-245-281-42   | Sequence 42, Appl1 | 662 | 24 | 1.7 | 59065  | 4 | US-09-978-197-3   | Sequence 3, Appl1  |
| 590 | 24 | 1.7 | 4141 | 4 | US-09-207-3598-42  | Sequence 42, Appl1 | 663 | 24 | 1.7 | 62804  | 4 | US-09-800-960-3   | Sequence 3, Appl1  |
| 591 | 24 | 1.7 | 4141 | 4 | US-09-340-620A-42  | Sequence 42, Appl1 | 664 | 24 | 1.7 | 64467  | 4 | US-09-803-671B-3  | Sequence 3, Appl1  |
| 592 | 24 | 1.7 | 4244 | 4 | US-09-620-312D-151 | Sequence 151, App  | 665 | 24 | 1.7 | 70000  | 4 | US-09-851-896-3   | Sequence 3, Appl1  |
| 593 | 24 | 1.7 | 4302 | 4 | US-09-245-281-38   | Sequence 38, Appl1 | 666 | 24 | 1.7 | 70000  | 4 | US-09-851-896-3   | Sequence 3, Appl1  |
| 594 | 24 | 1.7 | 4302 | 4 | US-09-207-3598-38  | Sequence 38, Appl1 | 667 | 24 | 1.7 | 75935  | 4 | US-09-984-890-3   | Sequence 3, Appl1  |
| 595 | 24 | 1.7 | 4302 | 4 | US-09-340-620A-38  | Sequence 38, Appl1 | 668 | 24 | 1.7 | 80246  | 3 | US-09-078-294-4   | Sequence 4, Appl1  |
| 596 | 24 | 1.7 | 4665 | 3 | US-08-948-378A-7   | Sequence 7, Appl1  | 669 | 24 | 1.7 | 81001  | 4 | US-09-750-580-1   | Sequence 1, Appl1  |
| 597 | 24 | 1.7 | 4665 | 3 | US-09-169-425C-7   | Sequence 7, Appl1  | 670 | 24 | 1.7 | 90841  | 4 | US-09-759-359A-3  | Sequence 3, Appl1  |
| 598 | 24 | 1.7 | 4665 | 4 | US-09-759-960-7    | Sequence 7, Appl1  | 671 | 24 | 1.7 | 112332 | 4 | US-09-741-150-3   | Sequence 3, Appl1  |
| 599 | 24 | 1.7 | 4741 | 1 | US-07-695-472B-4   | Sequence 4, Appl1  | 672 | 24 | 1.7 | 116592 | 4 | US-09-818-512-3   | Sequence 3, Appl1  |
| 600 | 24 | 1.7 | 4741 | 4 | US-09-106-375-4    | Sequence 4, Appl1  | 673 | 24 | 1.7 | 148567 | 4 | US-09-801-876B-3  | Sequence 3, Appl1  |
| 601 | 24 | 1.7 | 4742 | 1 | US-08-250-740-35   | Sequence 35, Appl1 | 674 | 24 | 1.7 | 162450 | 4 | US-09-345-882-1   | Sequence 1, Appl1  |
| 602 | 24 | 1.7 | 4781 | 2 | US-09-001-273-1    | Sequence 1, Appl1  | 675 | 24 | 1.7 | 162450 | 4 | US-09-345-882-1   | Sequence 1, Appl1  |
| 603 | 24 | 1.7 | 4781 | 3 | US-08-843-459A-1   | Sequence 1, Appl1  | 676 | 24 | 1.7 | 168575 | 4 | US-09-426-290-1   | Sequence 1, Appl1  |
| 604 | 24 | 1.7 | 4847 | 3 | US-09-061-400-1    | Sequence 1, Appl1  | 677 | 24 | 1.7 | 168575 | 4 | US-09-426-290-1   | Sequence 1, Appl1  |
| 605 | 24 | 1.7 | 5448 | 4 | US-09-620-312D-246 | Sequence 246, App  | 678 | 24 | 1.7 | 176373 | 2 | US-09-128-155-17  | Sequence 17, Appl1 |
| 606 | 24 | 1.7 | 5452 | 4 | US-09-620-312D-245 | Sequence 245, App  | 679 | 24 | 1.7 | 246240 | 2 | US-08-724-394A-20 | Sequence 20, Appl1 |
| 607 | 24 | 1.7 | 5847 | 4 | US-09-920-672-10   | Sequence 10, Appl1 | 680 | 24 | 1.7 | 246240 | 2 | US-08-724-394A-21 | Sequence 21, Appl1 |
| 608 | 24 | 1.7 | 5874 | 4 | US-09-844-634-98   | Sequence 98, Appl1 | 681 | 24 | 1.7 | 246240 | 2 | US-08-724-394A-22 | Sequence 22, Appl1 |
| 609 | 24 | 1.7 | 5965 | 4 | US-09-362-336A-1   | Sequence 1, Appl1  | 682 | 24 | 1.6 | 26     | 1 | US-08-621-91A-1   | Sequence 1, Appl1  |
| 610 | 24 | 1.7 | 5993 | 3 | US-09-383-630-1    | Sequence 1, Appl1  | 683 | 23 | 1.6 | 26     | 4 | US-09-522-217-38  | Sequence 38, Appl1 |
| 611 | 24 | 1.7 | 5993 | 3 | US-09-383-630-2    | Sequence 2, Appl1  | 684 | 23 | 1.6 | 26     | 4 | US-09-527-345-7   | Sequence 7, Appl1  |

|       |    |     |    |   |                     |                    |       |    |     |     |   |                    |                    |
|-------|----|-----|----|---|---------------------|--------------------|-------|----|-----|-----|---|--------------------|--------------------|
| C 685 | 23 | 1.6 | 27 | 4 | US-09-475-947A-153  | Sequence 153, App  | 758   | 23 | 1.6 | 64  | 1 | US-08-055-390-10   | Sequence 10, Appl  |
| C 686 | 23 | 1.6 | 33 | 3 | US-09-061-026-26    | Sequence 26, Appl  | C 759 | 23 | 1.6 | 65  | 4 | US-09-415-788A-32  | Sequence 32, Appl  |
| C 687 | 23 | 1.6 | 33 | 3 | US-09-466-138-26    | Sequence 26, Appl  | C 760 | 23 | 1.6 | 65  | 4 | US-09-415-788A-32  | Sequence 32, Appl  |
| C 688 | 23 | 1.6 | 33 | 6 | 5478746-1           | Patent No. 5478746 | C 761 | 23 | 1.6 | 65  | 4 | US-08-944-465-32   | Sequence 32, Appl  |
| C 689 | 23 | 1.6 | 37 | 1 | US-08-113-646A-38   | Sequence 38, Appl  | C 762 | 23 | 1.6 | 65  | 4 | US-09-415-866-32   | Sequence 32, Appl  |
| C 690 | 23 | 1.6 | 38 | 3 | US-09-120-386-3     | Sequence 3, Appl1  | C 763 | 23 | 1.6 | 65  | 4 | US-09-415-866-32   | Sequence 32, Appl  |
| C 691 | 23 | 1.6 | 38 | 3 | US-09-120-501-3     | Sequence 3, Appl1  | C 764 | 23 | 1.6 | 66  | 4 | US-09-183-636-1    | Sequence 1, Appl1  |
| C 692 | 23 | 1.6 | 38 | 4 | US-09-120-689-3     | Sequence 3, Appl1  | C 765 | 23 | 1.6 | 67  | 2 | US-08-972-225-1    | Sequence 1, Appl1  |
| C 693 | 23 | 1.6 | 38 | 4 | US-09-720-201A-19   | Sequence 19, Appl  | C 766 | 23 | 1.6 | 67  | 3 | US-09-337-944-1    | Sequence 1, Appl1  |
| C 694 | 23 | 1.6 | 40 | 3 | US-09-306-290-8     | Sequence 8, Appl1  | C 767 | 23 | 1.6 | 67  | 3 | US-09-620-958A-6   | Sequence 6, Appl1  |
| C 695 | 23 | 1.6 | 40 | 3 | US-09-306-290-35    | Sequence 35, Appl  | C 768 | 23 | 1.6 | 80  | 4 | US-09-284-627-15   | Sequence 15, Appl  |
| C 696 | 23 | 1.6 | 41 | 1 | US-08-113-646A-39   | Sequence 39, Appl  | C 769 | 23 | 1.6 | 90  | 3 | US-09-065-056-16   | Sequence 16, Appl  |
| C 697 | 23 | 1.6 | 41 | 3 | US-08-906-156A-89   | Sequence 89, Appl  | C 770 | 23 | 1.6 | 91  | 4 | US-09-404-879A-201 | Sequence 201, App  |
| C 698 | 23 | 1.6 | 41 | 4 | US-09-197-814-9     | Sequence 9, Appl1  | C 771 | 23 | 1.6 | 91  | 4 | US-09-338-923-201  | Sequence 201, App  |
| C 699 | 23 | 1.6 | 41 | 4 | US-09-920-581-9     | Sequence 9, Appl1  | C 772 | 23 | 1.6 | 91  | 4 | US-09-215-681-201  | Sequence 94, Appl  |
| C 700 | 23 | 1.6 | 42 | 1 | US-07-875-167-2     | Sequence 2, Appl1  | C 773 | 23 | 1.6 | 92  | 1 | US-08-120-827-94   | Sequence 94, Appl  |
| C 701 | 23 | 1.6 | 42 | 1 | US-08-287-164-2     | Sequence 2, Appl1  | C 774 | 23 | 1.6 | 100 | 3 | US-08-991-788A-30  | Sequence 30, Appl  |
| C 702 | 23 | 1.6 | 43 | 2 | US-08-975-902-17    | Sequence 17, Appl  | C 775 | 23 | 1.6 | 100 | 4 | US-09-062-451-30   | Sequence 30, Appl  |
| C 703 | 23 | 1.6 | 43 | 3 | US-09-251-565-17    | Sequence 17, Appl  | C 776 | 23 | 1.6 | 100 | 4 | US-09-598-326-30   | Sequence 30, Appl  |
| C 704 | 23 | 1.6 | 43 | 4 | US-09-165-239A-5    | Sequence 5, Appl1  | C 777 | 23 | 1.6 | 100 | 4 | US-09-289-198-30   | Sequence 293, App  |
| C 705 | 23 | 1.6 | 44 | 1 | US-08-113-646A-40   | Sequence 40, Appl  | C 778 | 23 | 1.6 | 101 | 4 | US-09-404-879A-293 | Sequence 293, App  |
| C 706 | 23 | 1.6 | 44 | 2 | US-08-778-494B-114  | Sequence 114, App  | C 779 | 23 | 1.6 | 101 | 4 | US-09-338-933-293  | Sequence 293, App  |
| C 707 | 23 | 1.6 | 47 | 3 | US-09-338-907-198   | Sequence 198, App  | C 780 | 23 | 1.6 | 101 | 4 | US-09-215-681-293  | Sequence 37, Appl  |
| C 708 | 23 | 1.6 | 47 | 3 | US-09-338-907-275   | Sequence 275, App  | C 781 | 23 | 1.6 | 101 | 4 | US-08-746-111-37   | Sequence 82, Appl  |
| C 709 | 23 | 1.6 | 47 | 4 | US-09-218-207-198   | Sequence 198, App  | C 782 | 23 | 1.6 | 105 | 3 | US-09-478-675-82   | Sequence 82, Appl  |
| C 710 | 23 | 1.6 | 47 | 4 | US-09-453-190B-12   | Sequence 12, Appl  | C 783 | 23 | 1.6 | 105 | 4 | US-08-120-827-82   | Sequence 28, Appl  |
| C 711 | 23 | 1.6 | 47 | 4 | US-09-619-103-10    | Sequence 10, Appl  | C 784 | 23 | 1.6 | 109 | 1 | US-08-478-675-82   | Sequence 1, Appl1  |
| C 712 | 23 | 1.6 | 47 | 4 | US-08-741-881-21    | Sequence 21, Appl  | C 785 | 23 | 1.6 | 109 | 1 | US-09-367-927A-1   | Sequence 99, Appl  |
| C 713 | 23 | 1.6 | 48 | 1 | US-08-739-158-21    | Sequence 21, Appl  | C 786 | 23 | 1.6 | 113 | 4 | US-08-120-827-99   | Sequence 99, Appl  |
| C 714 | 23 | 1.6 | 48 | 1 | US-08-739-158-21    | Sequence 21, Appl  | C 787 | 23 | 1.6 | 114 | 1 | US-08-478-675-82   | Sequence 28, Appl  |
| C 715 | 23 | 1.6 | 48 | 2 | US-08-404-796-21    | Sequence 21, Appl  | C 788 | 23 | 1.6 | 114 | 1 | US-08-153-051B-28  | Sequence 44, Appl  |
| C 716 | 23 | 1.6 | 48 | 3 | US-08-911-869-21    | Sequence 21, Appl  | C 789 | 23 | 1.6 | 120 | 1 | US-08-060-952A-44  | Sequence 44, Appl  |
| C 717 | 23 | 1.6 | 48 | 3 | US-09-350-399-21    | Sequence 21, Appl  | C 790 | 23 | 1.6 | 120 | 2 | US-08-151-477A-38  | Sequence 28, Appl  |
| C 718 | 23 | 1.6 | 48 | 4 | US-09-236-140A-21   | Sequence 21, Appl  | C 791 | 23 | 1.6 | 120 | 3 | US-08-819-867-58   | Sequence 58, Appl  |
| C 719 | 23 | 1.6 | 50 | 1 | US-08-233-609-5     | Sequence 5, Appl1  | C 792 | 23 | 1.6 | 120 | 4 | US-08-464-011B-44  | Sequence 44, Appl  |
| C 720 | 23 | 1.6 | 50 | 1 | US-08-381-572-20    | Sequence 20, Appl  | C 793 | 23 | 1.6 | 120 | 4 | US-09-378-535-58   | Sequence 58, Appl  |
| C 721 | 23 | 1.6 | 50 | 1 | US-08-444-083-5     | Sequence 5, Appl1  | C 794 | 23 | 1.6 | 128 | 4 | US-09-183-266A-10  | Sequence 10, Appl  |
| C 722 | 23 | 1.6 | 50 | 1 | US-08-286-304-5     | Sequence 5, Appl1  | C 795 | 23 | 1.6 | 130 | 6 | 5198345-15         | Patent No. 5198345 |
| C 723 | 23 | 1.6 | 50 | 1 | US-08-442-745-5     | Sequence 5, Appl1  | C 796 | 23 | 1.6 | 132 | 4 | US-09-702-705-1074 | Sequence 1074, Ap  |
| C 724 | 23 | 1.6 | 50 | 1 | US-08-443-129-5     | Sequence 5, Appl1  | C 797 | 23 | 1.6 | 132 | 4 | US-09-736-457-1074 | Sequence 1, Appl1  |
| C 725 | 23 | 1.6 | 50 | 1 | US-08-443-952-5     | Sequence 5, Appl1  | C 798 | 23 | 1.6 | 141 | 3 | US-08-737-078A-1   | Sequence 26, App   |
| C 726 | 23 | 1.6 | 50 | 1 | US-08-443-130-5     | Sequence 5, Appl1  | C 799 | 23 | 1.6 | 141 | 5 | PCT-US94-04706-1   | Sequence 26, App   |
| C 727 | 23 | 1.6 | 50 | 1 | US-08-592-820-20    | Sequence 20, Appl  | C 800 | 23 | 1.6 | 144 | 1 | US-08-702-344-26   | Sequence 76, App   |
| C 728 | 23 | 1.6 | 50 | 2 | US-08-663-823B-72   | Sequence 72, Appl  | C 801 | 23 | 1.6 | 144 | 4 | US-09-702-705-776  | Sequence 776, App  |
| C 729 | 23 | 1.6 | 50 | 3 | US-08-898-911-5     | Sequence 5, Appl1  | C 802 | 23 | 1.6 | 144 | 4 | US-09-736-457-776  | Sequence 776, App  |
| C 730 | 23 | 1.6 | 50 | 5 | PCT-US95-04467-5    | Sequence 5, Appl1  | C 803 | 23 | 1.6 | 165 | 2 | US-08-783-395-3    | Sequence 3, Appl1  |
| C 731 | 23 | 1.6 | 51 | 2 | US-08-582-562A-8    | Sequence 8, Appl1  | C 804 | 23 | 1.6 | 165 | 2 | US-08-924-838-9    | Sequence 9, Appl1  |
| C 732 | 23 | 1.6 | 51 | 2 | US-08-582-562A-8    | Sequence 8, Appl1  | C 805 | 23 | 1.6 | 193 | 3 | US-08-991-789A-266 | Sequence 266, App  |
| C 733 | 23 | 1.6 | 51 | 4 | US-09-225-201B-1373 | Sequence 1373, Ap  | C 806 | 23 | 1.6 | 193 | 4 | US-09-062-451-266  | Sequence 266, App  |
| C 734 | 23 | 1.6 | 51 | 4 | US-09-225-201B-1373 | Sequence 1373, Ap  | C 807 | 23 | 1.6 | 193 | 4 | US-09-289-198-266  | Sequence 266, App  |
| C 735 | 23 | 1.6 | 51 | 4 | US-09-225-201B-1373 | Sequence 1373, Ap  | C 808 | 23 | 1.6 | 199 | 4 | US-09-322-575-125  | Sequence 125, App  |
| C 736 | 23 | 1.6 | 51 | 4 | US-09-225-201B-1373 | Sequence 1373, Ap  | C 809 | 23 | 1.6 | 199 | 4 | US-09-389-681-125  | Sequence 125, App  |
| C 737 | 23 | 1.6 | 52 | 3 | US-08-618-100B-9    | Sequence 9, Appl   | C 810 | 23 | 1.6 | 199 | 4 | US-09-620-405B-125 | Sequence 125, App  |
| C 738 | 23 | 1.6 | 52 | 3 | US-08-778-494B-11   | Sequence 11, App   | C 811 | 23 | 1.6 | 199 | 4 | US-09-339-838-125  | Sequence 125, App  |
| C 739 | 23 | 1.6 | 54 | 2 | US-08-771-624B-24   | Sequence 24, Appl  | C 812 | 23 | 1.6 | 199 | 4 | US-09-433-826B-125 | Sequence 125, App  |
| C 740 | 23 | 1.6 | 55 | 1 | US-08-113-646A-41   | Sequence 41, Appl  | C 813 | 23 | 1.6 | 199 | 4 | US-09-604-287A-135 | Sequence 135, App  |
| C 741 | 23 | 1.6 | 55 | 2 | US-08-532-269B-18   | Sequence 18, Appl  | C 814 | 23 | 1.6 | 208 | 1 | US-08-686-878A-37  | Sequence 37, Appl  |
| C 742 | 23 | 1.6 | 55 | 2 | US-08-582-562A-16   | Sequence 16, Appl  | C 815 | 23 | 1.6 | 208 | 1 | US-08-967-101-98   | Sequence 98, Appl  |
| C 743 | 23 | 1.6 | 55 | 2 | US-08-778-494B-16   | Sequence 16, Appl  | C 816 | 23 | 1.6 | 208 | 2 | US-08-992-541-98   | Sequence 98, Appl  |
| C 744 | 23 | 1.6 | 55 | 2 | US-08-778-494B-67   | Sequence 67, Appl  | C 817 | 23 | 1.6 | 208 | 2 | US-09-124-698-98   | Sequence 98, Appl  |
| C 745 | 23 | 1.6 | 55 | 3 | US-09-294-923-18    | Sequence 18, Appl  | C 818 | 23 | 1.6 | 208 | 3 | US-09-127-480-98   | Sequence 98, Appl  |
| C 746 | 23 | 1.6 | 55 | 3 | US-09-944-036-32    | Sequence 32, Appl  | C 819 | 23 | 1.6 | 208 | 3 | US-08-496-841C-98  | Sequence 98, Appl  |
| C 747 | 23 | 1.6 | 56 | 3 | US-09-118-256-1     | Sequence 1, Appl1  | C 820 | 23 | 1.6 | 208 | 4 | US-09-175-928-37   | Sequence 37, Appl  |
| C 748 | 23 | 1.6 | 56 | 3 | US-09-118-256-2     | Sequence 2, Appl1  | C 821 | 23 | 1.6 | 208 | 4 | US-09-124-523-98   | Sequence 98, Appl  |
| C 749 | 23 | 1.6 | 56 | 4 | US-09-944-036-30    | Sequence 30, Appl  | C 822 | 23 | 1.6 | 208 | 4 | US-09-636-796A-98  | Sequence 98, Appl  |
| C 750 | 23 | 1.6 | 57 | 3 | US-09-620-958A-7    | Sequence 7, Appl1  | C 823 | 23 | 1.6 | 208 | 4 | US-08-431-048F-98  | Sequence 15, Appl  |
| C 751 | 23 | 1.6 | 57 | 4 | US-09-944-036-31    | Sequence 31, Appl  | C 824 | 23 | 1.6 | 222 | 3 | US-08-481-190-15   | Sequence 15, Appl  |
| C 752 | 23 | 1.6 | 58 | 2 | US-08-778-494B-109  | Sequence 109, App  | C 825 | 23 | 1.6 | 222 | 5 | PCT-US93-00869-15  | Sequence 15, Appl  |
| C 753 | 23 | 1.6 | 59 | 2 | US-08-778-494B-110  | Sequence 110, App  | C 826 | 23 | 1.6 | 223 | 4 | US-09-792-594-11   | Sequence 11, Appl  |
| C 754 | 23 | 1.6 | 60 | 1 | US-08-241-465B-11   | Sequence 11, Appl  | C 827 | 23 | 1.6 | 224 | 2 | US-08-731-272A-26  | Sequence 26, Appl  |
| C 755 | 23 | 1.6 | 60 | 4 | US-09-499-362-1     | Sequence 14, Appl  | C 828 | 23 | 1.6 | 228 | 4 | US-09-328-111-484  | Sequence 484, App  |
| C 756 | 23 | 1.6 | 60 | 4 | US-09-284-627-14    | Sequence 7, Appl1  | C 829 | 23 | 1.6 | 231 | 3 | US-09-328-111-287  | Sequence 287, App  |
| C 757 | 23 | 1.6 | 61 | 4 | US-09-457-959-7     | Sequence 7, Appl1  | C 830 | 23 | 1.6 | 231 | 3 | US-09-328-111-287  | Sequence 287, App  |



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| 831   | 23 | 1.6 | 237 | 3 | US-09-191-136-29   | Sequence 29, Appl  | 904   | 23 | 1.6 | 396 | 4 | US-09-004-730A-33  | Sequence 33, Appl |
| C 832 | 23 | 1.6 | 241 | 4 | US-09-389-681-333  | Sequence 333, App  | 905   | 23 | 1.6 | 398 | 4 | US-08-981-799A-33  | Sequence 33, Appl |
| C 833 | 23 | 1.6 | 241 | 4 | US-09-389-681-334  | Sequence 334, App  | 906   | 23 | 1.6 | 396 | 4 | US-09-904-615-62   | Sequence 62, Appl |
| C 834 | 23 | 1.6 | 241 | 4 | US-09-620-405B-333 | Sequence 333, App  | 907   | 23 | 1.6 | 399 | 1 | US-07-885-9730A-13 | Sequence 13, Appl |
| C 835 | 23 | 1.6 | 241 | 4 | US-09-620-405B-334 | Sequence 334, App  | 908   | 23 | 1.6 | 399 | 1 | US-08-298-687A-13  | Sequence 13, Appl |
| C 836 | 23 | 1.6 | 241 | 4 | US-09-433-826B-333 | Sequence 333, App  | C 909 | 23 | 1.6 | 399 | 1 | US-08-530-797-12   | Sequence 12, Appl |
| C 837 | 23 | 1.6 | 241 | 4 | US-09-433-826B-334 | Sequence 334, App  | C 910 | 23 | 1.6 | 399 | 2 | US-08-298-829-13   | Sequence 13, Appl |
| C 838 | 23 | 1.6 | 241 | 4 | US-09-604-287A-333 | Sequence 333, App  | C 911 | 23 | 1.6 | 399 | 2 | US-08-787-823-12   | Sequence 12, Appl |
| C 839 | 23 | 1.6 | 241 | 4 | US-09-604-287A-334 | Sequence 334, App  | C 912 | 23 | 1.6 | 403 | 3 | US-09-385-982-29   | Sequence 29, Appl |
| C 840 | 23 | 1.6 | 245 | 4 | US-09-149-476-70   | Sequence 70, Appl  | C 913 | 23 | 1.6 | 403 | 4 | US-09-387-212-2    | Sequence 2, Appl  |
| C 841 | 23 | 1.6 | 247 | 1 | US-08-691-641-4    | Sequence 4, Appl   | C 914 | 23 | 1.6 | 403 | 4 | US-09-948-802-2    | Sequence 2, Appl  |
| C 842 | 23 | 1.6 | 257 | 3 | US-09-385-982-370  | Sequence 370, Appl | C 915 | 23 | 1.6 | 408 | 4 | US-09-222-578-43   | Sequence 43, Appl |
| C 843 | 23 | 1.6 | 271 | 2 | US-08-731-272A-29  | Sequence 29, Appl  | C 916 | 23 | 1.6 | 408 | 4 | US-09-389-681-43   | Sequence 43, Appl |
| C 844 | 23 | 1.6 | 275 | 3 | US-09-328-113-385  | Sequence 385, App  | C 917 | 23 | 1.6 | 408 | 4 | US-09-620-405B-43  | Sequence 43, Appl |
| C 845 | 23 | 1.6 | 277 | 3 | US-09-007-005-3    | Sequence 3, Appl   | C 918 | 23 | 1.6 | 408 | 4 | US-09-339-338-43   | Sequence 43, Appl |
| C 846 | 23 | 1.6 | 277 | 3 | US-09-244-796-3    | Sequence 3, Appl   | C 919 | 23 | 1.6 | 408 | 4 | US-09-433-826B-43  | Sequence 43, Appl |
| C 847 | 23 | 1.6 | 278 | 4 | US-09-370-838-159  | Sequence 159, App  | C 920 | 23 | 1.6 | 408 | 4 | US-09-604-287A-43  | Sequence 43, Appl |
| C 848 | 23 | 1.6 | 289 | 1 | US-08-341-568-3    | Sequence 3, Appl   | C 921 | 23 | 1.6 | 412 | 4 | US-09-702-705-1047 | Sequence 1047, Ap |
| C 849 | 23 | 1.6 | 289 | 2 | US-08-911-020-3    | Sequence 3, Appl   | C 922 | 23 | 1.6 | 412 | 4 | US-09-736-457-1047 | Sequence 1047, Ap |
| C 850 | 23 | 1.6 | 289 | 3 | US-09-007-005-17   | Sequence 17, Appl  | C 923 | 23 | 1.6 | 413 | 2 | US-09-014-969-5    | Sequence 5, Appl  |
| C 851 | 23 | 1.6 | 289 | 3 | US-09-244-796-17   | Sequence 17, Appl  | C 924 | 23 | 1.6 | 413 | 3 | US-09-328-113-25   | Sequence 25, Appl |
| C 852 | 23 | 1.6 | 296 | 2 | US-09-032-684-13   | Sequence 13, Appl  | C 925 | 23 | 1.6 | 413 | 4 | US-09-091-097-41   | Sequence 41, Appl |
| C 853 | 23 | 1.6 | 296 | 3 | US-09-385-982-19   | Sequence 19, Appl  | C 926 | 23 | 1.6 | 435 | 3 | US-09-385-982-518  | Sequence 518, App |
| C 854 | 23 | 1.6 | 300 | 4 | US-09-205-258-143  | Sequence 143, App  | C 927 | 23 | 1.6 | 436 | 4 | US-09-439-313-353  | Sequence 353, App |
| C 855 | 23 | 1.6 | 302 | 4 | US-09-439-313-255  | Sequence 255, App  | C 928 | 23 | 1.6 | 436 | 4 | US-09-352-616A-353 | Sequence 353, App |
| C 856 | 23 | 1.6 | 302 | 4 | US-09-352-616A-255 | Sequence 255, App  | C 929 | 23 | 1.6 | 437 | 3 | US-09-040-984-74   | Sequence 74, Appl |
| C 857 | 23 | 1.6 | 302 | 4 | US-09-232-149A-255 | Sequence 255, App  | C 930 | 23 | 1.6 | 437 | 4 | US-09-123-912-74   | Sequence 74, Appl |
| C 858 | 23 | 1.6 | 309 | 1 | US-08-086-410-24   | Sequence 24, Appl  | C 931 | 23 | 1.6 | 437 | 4 | US-09-643-597-74   | Sequence 74, Appl |
| C 859 | 23 | 1.6 | 319 | 2 | US-08-244-537-11   | Sequence 11, Appl  | C 932 | 23 | 1.6 | 437 | 4 | US-09-480-884A-74  | Sequence 74, Appl |
| C 860 | 23 | 1.6 | 321 | 3 | US-09-385-982-366  | Sequence 366, App  | C 933 | 23 | 1.6 | 437 | 4 | US-09-542-615A-74  | Sequence 74, Appl |
| C 861 | 23 | 1.6 | 322 | 3 | US-09-385-982-216  | Sequence 216, App  | C 934 | 23 | 1.6 | 437 | 4 | US-09-606-421B-74  | Sequence 74, Appl |
| C 862 | 23 | 1.6 | 322 | 3 | US-09-385-982-362  | Sequence 362, App  | C 935 | 23 | 1.6 | 444 | 3 | US-08-688-988-44   | Sequence 44, Appl |
| C 863 | 23 | 1.6 | 324 | 2 | US-08-721-925A-4   | Sequence 4, Appl   | C 936 | 23 | 1.6 | 450 | 2 | US-08-967-101-7    | Sequence 7, Appl  |
| C 864 | 23 | 1.6 | 337 | 3 | US-09-385-982-544  | Sequence 544, App  | C 937 | 23 | 1.6 | 450 | 2 | US-08-592-541-7    | Sequence 7, Appl  |
| C 865 | 23 | 1.6 | 333 | 3 | US-09-328-111-797  | Sequence 797, App  | C 938 | 23 | 1.6 | 450 | 3 | US-09-124-698-7    | Sequence 7, Appl  |
| C 866 | 23 | 1.6 | 336 | 3 | US-09-385-982-508  | Sequence 508, App  | C 939 | 23 | 1.6 | 450 | 3 | US-09-127-480-7    | Sequence 7, Appl  |
| C 867 | 23 | 1.6 | 337 | 3 | US-09-328-111-586  | Sequence 586, App  | C 940 | 23 | 1.6 | 450 | 3 | US-08-496-841C-7   | Sequence 7, Appl  |
| C 868 | 23 | 1.6 | 340 | 1 | US-08-171-385-27   | Sequence 27, Appl  | C 941 | 23 | 1.6 | 450 | 4 | US-09-385-982-155  | Sequence 155, App |
| C 869 | 23 | 1.6 | 340 | 3 | US-08-361-441B-27  | Sequence 27, Appl  | C 942 | 23 | 1.6 | 450 | 4 | US-09-124-522-7    | Sequence 7, Appl  |
| C 870 | 23 | 1.6 | 340 | 3 | US-09-385-982-394  | Sequence 394, App  | C 943 | 23 | 1.6 | 450 | 4 | US-09-636-796A-7   | Sequence 7, Appl  |
| C 871 | 23 | 1.6 | 342 | 3 | US-09-385-982-342  | Sequence 342, App  | C 944 | 23 | 1.6 | 450 | 4 | US-09-702-705-388  | Sequence 388, App |
| C 872 | 23 | 1.6 | 347 | 1 | US-08-104-072B-2   | Sequence 2, Appl   | C 945 | 23 | 1.6 | 450 | 4 | US-09-736-457-388  | Sequence 388, App |
| C 873 | 23 | 1.6 | 349 | 3 | US-09-385-982-283  | Sequence 283, App  | C 946 | 23 | 1.6 | 457 | 3 | US-08-431-048F-7   | Sequence 7, Appl  |
| C 874 | 23 | 1.6 | 349 | 3 | US-09-385-982-22   | Sequence 22, Appl  | C 947 | 23 | 1.6 | 457 | 3 | US-09-385-982-15   | Sequence 15, Appl |
| C 875 | 23 | 1.6 | 350 | 1 | US-08-171-385-14   | Sequence 14, Appl  | C 948 | 23 | 1.6 | 458 | 1 | US-08-524-757-1    | Sequence 1, Appl  |
| C 876 | 23 | 1.6 | 350 | 1 | US-08-248-016-11   | Sequence 11, Appl  | C 949 | 23 | 1.6 | 458 | 2 | US-08-924-759-7    | Sequence 7, Appl  |
| C 877 | 23 | 1.6 | 350 | 1 | US-08-276-452A-48  | Sequence 48, Appl  | C 950 | 23 | 1.6 | 458 | 3 | US-09-248-335-7    | Sequence 7, Appl  |
| C 878 | 23 | 1.6 | 350 | 2 | US-08-451-501-11   | Sequence 11, Appl  | C 951 | 23 | 1.6 | 462 | 3 | US-09-385-982-504  | Sequence 504, App |
| C 879 | 23 | 1.6 | 350 | 2 | US-08-798-744-48   | Sequence 48, Appl  | C 952 | 23 | 1.6 | 466 | 3 | US-09-328-113-239  | Sequence 239, App |
| C 880 | 23 | 1.6 | 350 | 3 | US-08-361-441B-14  | Sequence 14, Appl  | C 953 | 23 | 1.6 | 467 | 4 | US-09-328-475C-122 | Sequence 122, App |
| C 881 | 23 | 1.6 | 350 | 5 | PCT-US95-06761-11  | Sequence 11, Appl  | C 954 | 23 | 1.6 | 469 | 3 | US-09-328-111-436  | Sequence 436, App |
| C 882 | 23 | 1.6 | 360 | 1 | US-07-920-519-28   | Sequence 28, Appl  | C 955 | 23 | 1.6 | 469 | 4 | US-09-222-578-128  | Sequence 128, App |
| C 883 | 23 | 1.6 | 360 | 1 | US-08-086-410-21   | Sequence 21, Appl  | C 956 | 23 | 1.6 | 469 | 4 | US-09-389-681-128  | Sequence 128, App |
| C 884 | 23 | 1.6 | 360 | 1 | US-08-314-586-28   | Sequence 28, Appl  | C 957 | 23 | 1.6 | 469 | 4 | US-09-620-405B-128 | Sequence 128, App |
| C 885 | 23 | 1.6 | 361 | 3 | US-09-385-982-26   | Sequence 26, Appl  | C 958 | 23 | 1.6 | 469 | 4 | US-09-339-338-128  | Sequence 128, App |
| C 886 | 23 | 1.6 | 367 | 3 | US-09-328-111-446  | Sequence 446, App  | C 959 | 23 | 1.6 | 469 | 4 | US-09-433-826B-128 | Sequence 128, App |
| C 887 | 23 | 1.6 | 370 | 4 | US-09-376-113-1    | Sequence 1, Appl   | C 960 | 23 | 1.6 | 469 | 4 | US-09-604-287A-128 | Sequence 128, App |
| C 888 | 23 | 1.6 | 374 | 3 | US-09-385-982-135  | Sequence 135, Appl | C 961 | 23 | 1.6 | 471 | 5 | PCT-US95-13658-1   | Sequence 1, Appl  |
| C 889 | 23 | 1.6 | 375 | 3 | US-08-946-026-23   | Sequence 23, Appl  | C 962 | 23 | 1.6 | 472 | 4 | US-09-394-630-1    | Sequence 1, Appl  |
| C 890 | 23 | 1.6 | 376 | 4 | US-09-220-132-128  | Sequence 128, App  | C 963 | 23 | 1.6 | 472 | 4 | US-09-702-705-892  | Sequence 892, App |
| C 891 | 23 | 1.6 | 380 | 1 | US-08-126-587C-5   | Sequence 5, Appl   | C 964 | 23 | 1.6 | 474 | 4 | US-09-736-457-892  | Sequence 892, App |
| C 892 | 23 | 1.6 | 390 | 3 | US-09-385-982-232  | Sequence 232, App  | C 965 | 23 | 1.6 | 474 | 3 | US-08-516-859A-97  | Sequence 97, Appl |
| C 893 | 23 | 1.6 | 390 | 4 | US-09-222-575-90   | Sequence 90, Appl  | C 966 | 23 | 1.6 | 474 | 4 | US-09-586-472-97   | Sequence 97, Appl |
| C 894 | 23 | 1.6 | 390 | 4 | US-09-389-681-90   | Sequence 90, Appl  | C 967 | 23 | 1.6 | 474 | 4 | US-09-528-706-97   | Sequence 97, Appl |
| C 895 | 23 | 1.6 | 390 | 4 | US-09-620-405B-90  | Sequence 90, Appl  | C 968 | 23 | 1.6 | 476 | 3 | US-09-020-956-80   | Sequence 80, Appl |
| C 896 | 23 | 1.6 | 390 | 4 | US-09-339-338-90   | Sequence 90, Appl  | C 969 | 23 | 1.6 | 476 | 3 | US-09-030-607-80   | Sequence 80, Appl |
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| C 898 | 23 | 1.6 | 390 | 4 | US-09-604-287A-90  | Sequence 90, Appl  | C 971 | 23 | 1.6 | 476 | 4 | US-09-352-616A-80  | Sequence 80, Appl |
| C 899 | 23 | 1.6 | 393 | 4 | US-09-439-313-357  | Sequence 357, App  | C 972 | 23 | 1.6 | 476 | 4 | US-09-232-149A-80  | Sequence 80, Appl |
| C 900 | 23 | 1.6 | 393 | 4 | US-09-352-616A-357 | Sequence 357, App  | C 973 | 23 | 1.6 | 476 | 4 | US-09-220-132-157  | Sequence 157, App |
| C 901 | 23 | 1.6 | 396 | 2 | US-08-630-822A-84  | Sequence 84, Appl  | C 974 | 23 | 1.6 | 479 | 3 | US-09-328-111-432  | Sequence 432, App |
| C 902 | 23 | 1.6 | 396 | 2 | US-09-005-069-84   | Sequence 84, Appl  | C 975 | 23 | 1.6 | 495 | 4 | US-09-105-542A-13  | Sequence 13, Appl |
| C 903 | 23 | 1.6 | 396 | 4 | US-09-171-156A-33  | Sequence 33, Appl  | C 976 | 23 | 1.6 | 495 | 4 | US-09-220-133-186  | Sequence 186, App |

977 23 1.6 496 4 US-09-904-615-60 Sequence 60, Appl  
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C 980 23 1.6 502 4 US-09-186-1888-29 Sequence 29, Appl  
981 23 1.6 506 4 US-09-370-838-263 Sequence 263, Appl  
982 23 1.6 519 4 US-09-227-357-76 Sequence 76, Appl  
C 983 23 1.6 520 4 US-09-220-132-171 Sequence 171, Appl  
984 23 1.6 522 4 US-08-909-965C-16 Sequence 16, Appl  
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986 23 1.6 530 4 US-09-461-325-28 Sequence 28, Appl  
C 987 23 1.6 535 3 US-09-385-982-385 Sequence 385, Appl  
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989 23 1.6 540 4 US-09-313-434C-15 Sequence 15, Appl  
C 990 23 1.6 543 4 US-09-904-615-33 Sequence 33, Appl  
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C 993 23 1.6 547 3 US-09-188-930-14 Sequence 14, Appl  
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## ALIGNMENTS

RESULT 1  
US-09-220-132-133  
; Sequence 133, Application US/09220132  
; Patent No. 6506607  
; GENERAL INFORMATION:  
; APPLICANT: Shyjan, Andrew W.  
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE IDENTIFICATION AND ASSESSMENT  
; FILE REFERENCE: 07334-074001  
; CURRENT APPLICATION NUMBER: US/09/220,132  
; CURRENT FILING DATE: 1998-12-23  
; PRIOR APPLICATION NUMBER: US 60/079,303  
; PRIOR FILING DATE: 1998-03-25  
; PRIOR APPLICATION NUMBER: US 60/068,821  
; PRIOR FILING DATE: 1997-12-24  
; NUMBER OF SEQ ID NOS: 191  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 133  
; LENGTH: 693  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-220-132-133

Query Match 1.9%; Score 27; DB 4; Length 693;  
Best Local Similarity 100.0%; Pred. No. 0.027;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1369 AAAAAAAAAAAAAAAAAAGGCGG 1395  
Db 663 AAAAAAAAAAAAAAAAAAGGCGG 668

RESULT 2  
US-09-220-132-191  
; Sequence 191, Application US/09220132  
; Patent No. 6506607  
; GENERAL INFORMATION:  
; APPLICANT: Shyjan, Andrew W.  
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE IDENTIFICATION AND ASSESSMENT  
; FILE REFERENCE: 07334-074001  
; CURRENT APPLICATION NUMBER: US/09/220,132  
; CURRENT FILING DATE: 1998-12-23  
; PRIOR APPLICATION NUMBER: US 60/079,303

; PRIOR FILING DATE: 1998-03-25  
; PRIOR APPLICATION NUMBER: US 60/068,821  
; PRIOR FILING DATE: 1997-12-24  
; NUMBER OF SEQ ID NOS: 191  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 191  
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; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-220-132-191

Query Match 1.9%; Score 27; DB 4; Length 775;  
Best Local Similarity 100.0%; Pred. No. 0.027;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1369 AAAAAAAAAAAAAAAAAAGGCGG 1395  
Db 745 AAAAAAAAAAAAAAAAAAGGCGG 771

RESULT 3  
US-09-220-132-175  
; Sequence 175, Application US/09220132  
; Patent No. 6506607  
; GENERAL INFORMATION:  
; APPLICANT: Shyjan, Andrew W.  
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE IDENTIFICATION AND ASSESSMENT  
; FILE REFERENCE: 07334-074001  
; CURRENT APPLICATION NUMBER: US/09/220,132  
; CURRENT FILING DATE: 1998-12-23  
; PRIOR APPLICATION NUMBER: US 60/079,303  
; PRIOR FILING DATE: 1998-03-25  
; PRIOR APPLICATION NUMBER: US 60/068,821  
; PRIOR FILING DATE: 1997-12-24  
; NUMBER OF SEQ ID NOS: 191  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 175  
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; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-220-132-175

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Db 1193 AAAAAAAAAAAAAAAAAAGGCGG 1219

RESULT 4  
US-08-473-981A-5  
; Sequence 5, Application US/08473981A  
; Patent No. 5629162  
; GENERAL INFORMATION:  
; APPLICANT: defougerolles, Antonin R  
; APPLICANT: Springer, Timothy A  
; TITLE OF INVENTION: METHODS OF IDENTIFYING AGENTS WHICH MODULATE  
; NUMBER OF SEQUENCES: 14  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: STERN, KESSLER, GOLDSTEIN & FOX, P.L.L.C.  
; STREET: 1100 NEW YORK AVENUE, N.W. SUITE 600  
; CITY: WASHINGTON  
; STATE: D. C.  
; COUNTRY: USA  
; ZIP: 20005  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/473,981A  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: MILLOWIG, ROBERT C  
REGISTRATION NUMBER: 34,395  
REFERENCE/DOCKET NUMBER: 1011.0560004  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202) 371-2600  
TELEFAX: (202) 371-2540  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1817 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: both  
TOPOLOGY: both  
MOLECULE TYPE: DNA (genomic)  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 9..1649  
US-08-473-981A-5

Query Match 1.9%; Score 27; DB 1; Length 1817;  
Best Local Similarity 100.0%; Pred. No. 0.025;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1364 TCCCTAAAAAAAAAAAAAAAAAAAA 1390  
DB 1727 TCCCTAAAAAAAAAAAAAAAAAAAA 1753

RESULT 5  
US-08-474-087-5  
Sequence 5, Application US/08474087  
Patent No. 5891841  
GENERAL INFORMATION:  
APPLICANT: de Fougereolles, Antonin R  
APPLICANT: Springer, Timothy A  
TITLE OF INVENTION: METHODS OF USING INTERCELLULAR ADHESION MOLECULE-  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: STERN, KESSLER, GOLDSTEIN & FOX, P.L.L.C.  
STREET: 1100 NEW YORK AVENUE, N.W. SUITE 600  
CITY: WASHINGTON  
STATE: D. C.  
COUNTRY: USA  
ZIP: 20005  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/474,087  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/038,990  
FILING DATE: 23-DEC-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/712,879  
FILING DATE: 11-JUN-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: MILLOWIG, ROBERT C  
REGISTRATION NUMBER: 34,395  
REFERENCE/DOCKET NUMBER: 1011.0560003  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202) 371-2600  
TELEFAX: (202) 371-2540  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:

LENGTH: 1817 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: both  
TOPOLOGY: both  
MOLECULE TYPE: DNA (genomic)  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 9..1649  
US-08-474-087-5

Query Match 1.9%; Score 27; DB 2; Length 1817;  
Best Local Similarity 100.0%; Pred. No. 0.025;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1364 TCCCTAAAAAAAAAAAAAAAAAAAA 1390  
DB 1727 TCCCTAAAAAAAAAAAAAAAAAAAA 1753

RESULT 6  
US-09-130-491-7  
Sequence 7, Application US/09130491  
Patent No. 6416974  
GENERAL INFORMATION:  
APPLICANT: Holtzman, Douglas A.  
APPLICANT: Goodearl, Andrew D.J.  
TITLE OF INVENTION: TANGO-71, TANGO-73, TANGO-74, TANGO-76, AND TANGO-83  
FILE REFERENCE: 09404/041001  
CURRENT APPLICATION NUMBER: US/09/130,491  
CURRENT FILING DATE: 1998-08-07  
EARLIER APPLICATION NUMBER: US 60/058,108  
EARLIER FILING DATE: 1997-09-05  
EARLIER APPLICATION NUMBER: US 60/054,961  
EARLIER FILING DATE: 1997-08-06  
NUMBER OF SEQ ID NOS: 16  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 7  
LENGTH: 2114  
TYPE: DNA  
ORGANISM: Rattus rattus  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (3)...(1445)  
US-09-130-491-7

Query Match 1.9%; Score 27; DB 4; Length 2114;  
Best Local Similarity 100.0%; Pred. No. 0.025;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1369 AAAAAAAAAAAAAAAAAAGCGCG 1395  
DB 2084 AAAAAAAAAAAAAAAAAAGCGCG 2110

RESULT 7  
US-09-798-096-10/C  
Sequence 10, Application US/09798096  
Patent No. 639378  
GENERAL INFORMATION:  
APPLICANT: Donna T. Ward  
APPLICANT: Andrew T. Watt  
TITLE OF INVENTION: ANTISENSE MODULATION OF REOGL2 EXPRESSION  
FILE REFERENCE: RTS-0207  
CURRENT APPLICATION NUMBER: US/09/798,096  
CURRENT FILING DATE: 2001-03-01  
NUMBER OF SEQ ID NOS: 89  
SEQ ID NO 10  
LENGTH: 99500  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (3)...(1445)  
US-09-798-096-10

Query Match 1.9%; Score 27; DB 4; Length 99500;  
Best Local Similarity 100.0%; Pred. No. 0.02;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1367 CTTAAAAAAAAAAAAAAAAAGGC 1393  
Db 57302 CTTAAAAAAAAAAAAAAAAAGGC 57276

## RESULT 8

US-09-328-475C-196/C  
; Sequence 196, Application US/09328475C  
; Patent No. 6476207  
; GENERAL INFORMATION:  
; APPLICANT: Zhang, Jimmy  
; APPLICANT: Astel, Jon H.  
; APPLICANT: Carroll III, Eddie  
; APPLICANT: Endege, Wilson O.  
; APPLICANT: Ford, Donna M.  
; APPLICANT: Monahan, John E.  
; APPLICANT: Schlegel, Robert  
; APPLICANT: Steinmann, Kathleen E.  
; TITLE OF INVENTION: GENES AND GENE EXPRESSION PRODUCTS THAT  
; FILE REFERENCE: ARE DIFFERENTIALLY REGULATED IN PROSTATE CANCER  
; CURRENT FILING DATE: 1532.002/200130.463  
; CURRENT APPLICATION NUMBER: US/09/328,475C  
; CURRENT FILING DATE: 1999-06-09  
; NUMBER OF SEQ ID NOS: 341  
; SOFTWARE: PatSeq for Windows Version 3.0  
; SEQ ID NO 196  
; LENGTH: 511  
; TYPE: DNA  
; ORGANISM: Homo Sapien  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION: (1)..(511)  
; OTHER INFORMATION: n = A,T,C or G  
US-09-328-475C-196

Query Match 1.9%; Score 26; DB 4; Length 511;  
Best Local Similarity 100.0%; Pred. No. 0.072;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1365 CCTAAAAAAAAAAAAAAAAA 1390  
Db 138 CCTAAAAAAAAAAAAAAAAA 113

## RESULT 9

US-09-122-400B-11  
; Sequence 11, Application US/09122400B  
; Patent No. 6245974  
; GENERAL INFORMATION:  
; APPLICANT: Michalowski, Susan  
; APPLICANT: Spiker, Steven  
; TITLE OF INVENTION: MATRIX ATTACHMENT REGIONS  
; FILE REFERENCE: Michalowski and Spiker  
; CURRENT APPLICATION NUMBER: US/09/122,400B  
; CURRENT FILING DATE: 1998-07-24  
; PRIOR APPLICATION NUMBER: 60/066,118  
; PRIOR FILING DATE: 1997-08-06  
; NUMBER OF SEQ ID NOS: 22  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 11  
; LENGTH: 899  
; TYPE: DNA  
; ORGANISM: Nicotiana tabacum  
US-09-122-400B-11

Query Match 1.9%; Score 26; DB 3; Length 899;  
Best Local Similarity 100.0%; Pred. No. 0.069;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1365 CCTAAAAAAAAAAAAAAAAA 1390  
Db 804 CCTAAAAAAAAAAAAAAAAA 829

## RESULT 10

US-09-257-179-28  
; Sequence 28, Application US/09257179  
; Patent No. 6410709  
; GENERAL INFORMATION:  
; APPLICANT: Ruben et al.  
; TITLE OF INVENTION: 29 Human Secreted Proteins  
; FILE REFERENCE: P2015P1  
; CURRENT APPLICATION NUMBER: US/09/257,179  
; CURRENT FILING DATE: 1999-02-25  
; EARLIER APPLICATION NUMBER: PCT/US98/17709  
; EARLIER FILING DATE: 1998-08-27  
; EARLIER APPLICATION NUMBER: 60/056,270  
; EARLIER FILING DATE: 1997-08-29  
; EARLIER APPLICATION NUMBER: 60/056,271  
; EARLIER FILING DATE: 1997-08-29  
; EARLIER APPLICATION NUMBER: 60/056,247  
; EARLIER FILING DATE: 1997-08-29  
; EARLIER APPLICATION NUMBER: 60/056,073  
; EARLIER FILING DATE: 1997-08-29  
; NUMBER OF SEQ ID NOS: 128  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 28  
; LENGTH: 1327  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-257-179-28

Query Match 1.9%; Score 26; DB 4; Length 1327;  
Best Local Similarity 100.0%; Pred. No. 0.068;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1370 AAAAAAAAAAAAAAAAAAGCGG 1395  
Db 1300 AAAAAAAAAAAAAAAAAAGCGG 1325

## RESULT 11

US-09-620-312D-722  
; Sequence 722, Application US/09620312D  
; Patent No. 6569662  
; GENERAL INFORMATION:  
; APPLICANT: Tang, Y. Tom  
; APPLICANT: Liu, Chenghua  
; APPLICANT: Auendi, Vinod  
; APPLICANT: Zhang, Jie  
; APPLICANT: Ren, Feiyan  
; APPLICANT: Chen, Rui-hong  
; APPLICANT: Zhao, Qing A.  
; APPLICANT: Wehrman, Tom  
; APPLICANT: Xue, Aidong J.  
; APPLICANT: Yang, Yonghong  
; APPLICANT: Wang, Jian-Rui  
; APPLICANT: Zhou, Ping  
; APPLICANT: Ma, Yungting  
; APPLICANT: Wang, Dunrui  
; APPLICANT: Wang, Zhilwei  
; APPLICANT: John Tillinghaast  
; APPLICANT: Drmanac, Radoje T.  
; TITLE OF INVENTION: No. 6569662el Nucleic Acids and  
; FILE REFERENCE: Polypeptides  
; CURRENT APPLICATION NUMBER: US/09/620,312D  
; CURRENT FILING DATE: 2000-07-19  
; PRIOR APPLICATION NUMBER: 09/552,317  
; PRIOR FILING DATE: 2000-04-25  
; PRIOR APPLICATION NUMBER: 09/488,725  
; PRIOR FILING DATE: 2000-01-21

NUMBER OF SEQ ID NOS: 1105  
SOFTWARE: pt\_fl\_genes Version 1.0  
SEQ ID NO 722  
LENGTH: 1509  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (557) ..(1312)  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (1) ..(1509)  
OTHER INFORMATION: n = a,t,c or g  
US-09-620-312D-722

Query Match 1.9%; Score 26; DB 4; Length 1509;  
Best Local Similarity 100.0%; Pred. No. 0.067;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1365 CCTAATAAAAAAAAAAAAAAAAAA 1390  
Db 1484 CCTAATAAAAAAAAAAAAAAAAAA 1509

RESULT 12  
US-09-482-273-51  
Sequence 51, Application US/09482273  
Patent No. 6534631

GENERAL INFORMATION:  
APPLICANT: Rosen et al.  
TITLE OF INVENTION: 71 Human Secreted Proteins  
FILE REFERENCE: P2030P1  
CURRENT APPLICATION NUMBER: US/09/482,273

EARLIER FILING DATE: 2000-01-13  
EARLIER APPLICATION NUMBER: PCT/US99/15849  
EARLIER FILING DATE: 1999-07-14  
EARLIER APPLICATION NUMBER: 60/092,921  
EARLIER FILING DATE: 1998-07-15  
EARLIER APPLICATION NUMBER: 60/092,922  
EARLIER FILING DATE: 1998-07-15  
EARLIER APPLICATION NUMBER: 60/092,956  
EARLIER FILING DATE: 1998-07-15

NUMBER OF SEQ ID NOS: 267  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 51

LENGTH: 1569

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: SITE

LOCATION: (341)

OTHER INFORMATION: n equals a,t,g, or c  
US-09-482-273-51

Query Match 1.9%; Score 26; DB 4; Length 1569;  
Best Local Similarity 100.0%; Pred. No. 0.067;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1365 CCTAATAAAAAAAAAAAAAAAAAA 1390  
Db 1537 CCTAATAAAAAAAAAAAAAAAAAA 1562

RESULT 13

US-09-489-847-48  
Sequence 48, Application US/09489847  
Patent No. 6476195

GENERAL INFORMATION:

APPLICANT: Rosen et al.

TITLE OF INVENTION: 98 Human Secreted Proteins

FILE REFERENCE: P2031P1

CURRENT APPLICATION NUMBER: US/09/489,847

CURRENT FILING DATE: 2000-01-24

EARLIER APPLICATION NUMBER: PCT/US99/17130  
EARLIER FILING DATE: 1999-07-29  
EARLIER APPLICATION NUMBER: 60/094,657  
EARLIER FILING DATE: 1998-07-30  
EARLIER APPLICATION NUMBER: 60/095,486  
EARLIER FILING DATE: 1998-08-05  
EARLIER APPLICATION NUMBER: 60/096,319  
EARLIER FILING DATE: 1998-08-12  
EARLIER APPLICATION NUMBER: 60/095,454  
EARLIER FILING DATE: 1998-08-06  
EARLIER APPLICATION NUMBER: 60/095,455  
EARLIER FILING DATE: 1998-08-06  
NUMBER OF SEQ ID NOS: 376  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 48  
LENGTH: 1730  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-489-847-48

Query Match 1.9%; Score 26; DB 4; Length 1730;  
Best Local Similarity 100.0%; Pred. No. 0.067;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1367 CTAATAAAAAAAAAAAAAAAAAAGG 1392  
Db 1699 CTAATAAAAAAAAAAAAAAAAAAGG 1724

RESULT 14  
US-08-836-567-3

Sequence 3, Application US/08836567  
Patent No. 6130367

GENERAL INFORMATION:

APPLICANT: Kossmann, Jens

APPLICANT: Springer, Franziska

APPLICANT: Abel, Gernot

TITLE OF INVENTION: DNA MOLECULES THAT CODE FOR ENZYMES

TITLE OF INVENTION: INVOLVED IN STARCH SYNTHESIS VECTORS BACTERIA TRANSGENIC

TITLE OF INVENTION: PLANT CELLS AND PLANTS CONTAINING SAID MOLECULES

NUMBER OF SEQUENCES: 17

CORRESPONDENCE ADDRESS:

ADDRESSEE: FISH & NEAVE

STREET: 1251 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10020

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/836,567

FILING DATE: 24-JUL-1997

CLASSIFICATION: 800

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/EP95/04415

FILING DATE: 09-NOV-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: DE P 44 41 408.0

FILING DATE: 10-NOV-1994

ATTORNEY/AGENT INFORMATION:

NAME: Haley Jr., James F.

REGISTRATION NUMBER: 27,794

REFERENCE/DOCKET NUMBER: Agrevo-4

TELECOMMUNICATION INFORMATION:

TELEPHONE: 212-596-9000

TELEFAX: 212-596-9090

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 1758 base pairs

TYPE: nucleotide  
STRANDEDNESS: unknown  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA to mRNA  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Solanum tuberosum  
STRAIN: cv. Berolina  
TISSUE TYPE: tuber tissue  
IMMEDIATE SOURCE:  
LIBRARY: cDNA-library in pBluescriptSKII+  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..1377  
OTHER INFORMATION: /function= "Polymerization of  
starch"  
OTHER INFORMATION: /product= "Starch synthase"  
US-08-836-567-3

Query Match 1.9%; Score 26; DB 3; Length 1758;  
Best Local Similarity 100.0%; Pred. No. 0.067;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1365 CCCTAAAAAAAAAAAAAAAAAAAAA 1390  
DB 1719 CCCTAAAAAAAAAAAAAAAAAAAAA 1744

RESULT 15  
US-09-606-304-3  
Sequence 3, Application US/09606304  
Patent No. 6483010

GENERAL INFORMATION:

APPLICANT: Kossmann, Jens  
Springer, Franziska  
Abel, Gernot

TITLE OF INVENTION: DNA MOLECULES THAT CODE FOR ENZYMES  
INVOLVED IN STARCH SYNTHESIS VECTORS BACTERIA TRANSGENIC  
PLANT CELLS AND PLANTS CONTAINING SAID MOLECULES

NUMBER OF SEQUENCES: 17  
CORRESPONDENCE ADDRESS:

ADDRESSEE: FISH & NEAVE  
STREET: 1251 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10020

COMPUTER READABLE FORM:

MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/606,304  
FILING DATE: 28-Jun-2000

CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/836,567  
FILING DATE: <Unknown>

APPLICATION NUMBER: DE P 44 41 408.0  
FILING DATE: 10-NOV-1994

ATTORNEY/AGENT INFORMATION:

NAME: Haley Jr., James F.  
REGISTRATION NUMBER: 27,794

REFERENCE/DOCKET NUMBER: Agrevo-4  
TELECOMMUNICATION INFORMATION:

TELEPHONE: 212-596-9000  
TELEFAX: 212-596-9090

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:  
LENGTH: 1758 base pairs  
TYPE: nucleotide

STRANDEDNESS: unknown  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA to mRNA  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Solanum tuberosum  
STRAIN: cv. Berolina  
TISSUE TYPE: tuber tissue  
IMMEDIATE SOURCE:  
LIBRARY: cDNA-library in pBluescriptSKII+  
OTHER INFORMATION: CDS  
FEATURE:  
LOCATION: 1..1377  
OTHER INFORMATION: /function= "Polymerization of  
starch"  
/product= "Starch synthase"  
SEQUENCE DESCRIPTION: SEQ ID NO: 3:  
US-09-606-304-3

Query Match 1.9%; Score 26; DB 4; Length 1758;  
Best Local Similarity 100.0%; Pred. No. 0.067;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1365 CCCTAAAAAAAAAAAAAAAAAAAAA 1390  
DB 1719 CCCTAAAAAAAAAAAAAAAAAAAAA 1744

Search completed: December 13, 2003, 20:15:18  
Job time : 101 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2003 Compen Ltd.

OM nucleic - nucleic search, using sw model

Run on: December 13, 2003, 20:07:08 ; Search time 359 Seconds  
(without alignments)  
12933.337 Million cell updates/sec

Title: US-09-989-919-15

Perfect score: 1397  
Sequence: 1 gggtgcgcacacgtaccgga.....aaaaaaaaaagcggtc 1397

Scoring table: OLIGO\_NTIC  
Gapop 60.0, Gapext 60.0

Searched: 2201672 seqs, 1661799599 residues

Word size : 0  
Total number of hits satisfying chosen parameters: 4403344

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Listing first 1000 summaries

Database : Published Applications NA:\*

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- 3: /cgn2\_6/prodata/1/pubpna/US06\_NEW\_PUB.seq:\*
- 4: /cgn2\_6/prodata/1/pubpna/US06\_PUBCOMB.seq:\*
- 5: /cgn2\_6/prodata/1/pubpna/US07\_NEW\_PUB.seq:\*
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- 7: /cgn2\_6/prodata/1/pubpna/US08\_NEW\_PUB.seq:\*
- 8: /cgn2\_6/prodata/1/pubpna/US08\_PUBCOMB.seq:\*
- 9: /cgn2\_6/prodata/1/pubpna/US09\_PUBCOMB.seq:\*
- 10: /cgn2\_6/prodata/1/pubpna/US09C\_PUBCOMB.seq:\*
- 11: /cgn2\_6/prodata/1/pubpna/US09C\_NEW\_PUB.seq:\*
- 12: /cgn2\_6/prodata/1/pubpna/US09\_NEW\_PUB.seq:\*
- 13: /cgn2\_6/prodata/1/pubpna/US09\_NEW\_PUB.seq2:\*
- 14: /cgn2\_6/prodata/1/pubpna/US10\_PUBCOMB.seq:\*
- 15: /cgn2\_6/prodata/1/pubpna/US10\_PUBCOMB.seq:\*
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- 17: /cgn2\_6/prodata/1/pubpna/US60\_NEW\_PUB.seq:\*
- 18: /cgn2\_6/prodata/1/pubpna/US60\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

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| 2          | 876   | 62.7        | 1714   | 13 | US-10-006-285-474   |
| 3          | 442   | 31.6        | 470    | 10 | US-09-989-919-14    |
| 4          | 322   | 23.0        | 427    | 10 | US-09-880-107-118   |
| 5          | 97    | 6.9         | 493    | 11 | US-09-918-995-32213 |
| 6          | 36    | 2.6         | 1358   | 13 | US-10-006-285-304   |
| 7          | 30    | 2.1         | 386    | 9  | US-09-770-791-70    |
| 8          | 30    | 2.1         | 421    | 10 | US-09-867-701-3641  |
| 9          | 30    | 2.1         | 777    | 9  | US-09-770-445-884   |
| 10         | 30    | 2.1         | 2457   | 13 | US-10-199-672-569   |
| 11         | 30    | 2.1         | 2457   | 13 | US-10-187-749-569   |
| 12         | 30    | 2.1         | 2457   | 13 | US-10-194-457-569   |
| 13         | 30    | 2.1         | 2457   | 13 | US-10-184-642-569   |
| 14         | 30    | 2.1         | 2457   | 13 | US-10-196-747-569   |
| 15         | 30    | 2.1         | 2457   | 13 | US-10-173-689-569   |

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| 16 | 30 | 2.1 | 2457 | 13 | US-10-173-690-569 | Sequence 569, App |
| 17 | 30 | 2.1 | 2457 | 13 | US-10-173-691-569 | Sequence 569, App |
| 18 | 30 | 2.1 | 2457 | 13 | US-10-173-692-569 | Sequence 569, App |
| 19 | 30 | 2.1 | 2457 | 13 | US-10-173-693-569 | Sequence 569, App |
| 20 | 30 | 2.1 | 2457 | 13 | US-10-173-694-569 | Sequence 569, App |
| 21 | 30 | 2.1 | 2457 | 13 | US-10-173-695-569 | Sequence 569, App |
| 22 | 30 | 2.1 | 2457 | 13 | US-10-173-696-569 | Sequence 569, App |
| 23 | 30 | 2.1 | 2457 | 13 | US-10-173-697-569 | Sequence 569, App |
| 24 | 30 | 2.1 | 2457 | 13 | US-10-173-698-569 | Sequence 569, App |
| 25 | 30 | 2.1 | 2457 | 13 | US-10-173-699-569 | Sequence 569, App |
| 26 | 30 | 2.1 | 2457 | 13 | US-10-173-700-569 | Sequence 569, App |
| 27 | 30 | 2.1 | 2457 | 13 | US-10-173-701-569 | Sequence 569, App |
| 28 | 30 | 2.1 | 2457 | 13 | US-10-173-702-569 | Sequence 569, App |
| 29 | 30 | 2.1 | 2457 | 13 | US-10-173-703-569 | Sequence 569, App |
| 30 | 30 | 2.1 | 2457 | 13 | US-10-173-704-569 | Sequence 569, App |
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| 32 | 30 | 2.1 | 2457 | 13 | US-10-173-706-569 | Sequence 569, App |
| 33 | 30 | 2.1 | 2457 | 13 | US-10-173-707-569 | Sequence 569, App |
| 34 | 30 | 2.1 | 2457 | 13 | US-10-173-708-569 | Sequence 569, App |
| 35 | 30 | 2.1 | 2457 | 13 | US-10-173-709-569 | Sequence 569, App |
| 36 | 30 | 2.1 | 2457 | 13 | US-10-173-710-569 | Sequence 569, App |
| 37 | 30 | 2.1 | 2457 | 13 | US-10-173-711-569 | Sequence 569, App |
| 38 | 30 | 2.1 | 2457 | 13 | US-10-173-712-569 | Sequence 569, App |
| 39 | 30 | 2.1 | 2457 | 13 | US-10-173-713-569 | Sequence 569, App |
| 40 | 30 | 2.1 | 2457 | 13 | US-10-173-714-569 | Sequence 569, App |
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| 42 | 30 | 2.1 | 2457 | 13 | US-10-173-716-569 | Sequence 569, App |
| 43 | 30 | 2.1 | 2457 | 13 | US-10-173-717-569 | Sequence 569, App |
| 44 | 30 | 2.1 | 2457 | 13 | US-10-173-718-569 | Sequence 569, App |
| 45 | 30 | 2.1 | 2457 | 13 | US-10-173-719-569 | Sequence 569, App |
| 46 | 30 | 2.1 | 2457 | 13 | US-10-173-720-569 | Sequence 569, App |
| 47 | 30 | 2.1 | 2457 | 13 | US-10-173-721-569 | Sequence 569, App |
| 48 | 30 | 2.1 | 2457 | 13 | US-10-173-722-569 | Sequence 569, App |
| 49 | 30 | 2.1 | 2457 | 13 | US-10-173-723-569 | Sequence 569, App |
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| 51 | 30 | 2.1 | 2457 | 13 | US-10-173-725-569 | Sequence 569, App |
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| 53 | 30 | 2.1 | 2457 | 13 | US-10-173-727-569 | Sequence 569, App |
| 54 | 30 | 2.1 | 2457 | 13 | US-10-173-728-569 | Sequence 569, App |
| 55 | 30 | 2.1 | 2457 | 13 | US-10-173-729-569 | Sequence 569, App |
| 56 | 30 | 2.1 | 2457 | 13 | US-10-173-730-569 | Sequence 569, App |
| 57 | 30 | 2.1 | 2457 | 13 | US-10-173-731-569 | Sequence 569, App |
| 58 | 30 | 2.1 | 2457 | 13 | US-10-173-732-569 | Sequence 569, App |
| 59 | 30 | 2.1 | 2457 | 13 | US-10-173-733-569 | Sequence 569, App |
| 60 | 30 | 2.1 | 2457 | 13 | US-10-173-734-569 | Sequence 569, App |
| 61 | 30 | 2.1 | 2457 | 13 | US-10-173-735-569 | Sequence 569, App |
| 62 | 30 | 2.1 | 2457 | 13 | US-10-173-736-569 | Sequence 569, App |
| 63 | 30 | 2.1 | 2457 | 13 | US-10-173-737-569 | Sequence 569, App |
| 64 | 30 | 2.1 | 2457 | 13 | US-10-173-738-569 | Sequence 569, App |
| 65 | 30 | 2.1 | 2457 | 13 | US-10-173-739-569 | Sequence 569, App |
| 66 | 30 | 2.1 | 2457 | 13 | US-10-173-740-569 | Sequence 569, App |
| 67 | 30 | 2.1 | 2457 | 13 | US-10-173-741-569 | Sequence 569, App |
| 68 | 30 | 2.1 | 2457 | 13 | US-10-173-742-569 | Sequence 569, App |
| 69 | 30 | 2.1 | 2457 | 13 | US-10-173-743-569 | Sequence 569, App |
| 70 | 30 | 2.1 | 2457 | 13 | US-10-173-744-569 | Sequence 569, App |
| 71 | 30 | 2.1 | 2457 | 13 | US-10-173-745-569 | Sequence 569, App |
| 72 | 30 | 2.1 | 2457 | 13 | US-10-173-746-569 | Sequence 569, App |
| 73 | 30 | 2.1 | 2457 | 13 | US-10-173-747-569 | Sequence 569, App |
| 74 | 30 | 2.1 | 2457 | 13 | US-10-173-748-569 | Sequence 569, App |
| 75 | 30 | 2.1 | 2457 | 13 | US-10-173-749-569 | Sequence 569, App |
| 76 | 30 | 2.1 | 2457 | 13 | US-10-173-750-569 | Sequence 569, App |
| 77 | 30 | 2.1 | 2457 | 13 | US-10-173-751-569 | Sequence 569, App |
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| 79 | 30 | 2.1 | 2457 | 13 | US-10-173-753-569 | Sequence 569, App |
| 80 | 30 | 2.1 | 2457 | 13 | US-10-173-754-569 | Sequence 569, App |
| 81 | 30 | 2.1 | 2457 | 13 | US-10-173-755-569 | Sequence 569, App |
| 82 | 30 | 2.1 | 2457 | 13 | US-10-173-756-569 | Sequence 569, App |
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| 84 | 30 | 2.1 | 2457 | 13 | US-10-173-758-569 | Sequence 569, App |
| 85 | 30 | 2.1 | 2457 | 13 | US-10-173-759-569 | Sequence 569, App |
| 86 | 30 | 2.1 | 2457 | 13 | US-10-173-760-569 | Sequence 569, App |
| 87 | 30 | 2.1 | 2457 | 13 | US-10-173-761-569 | Sequence 569, App |
| 88 | 30 | 2.1 | 2457 | 13 | US-10-173-762-569 | Sequence 569, App |

|     |    |     |      |                   |                   |     |    |     |      |                   |                   |
|-----|----|-----|------|-------------------|-------------------|-----|----|-----|------|-------------------|-------------------|
| 89  | 30 | 2.1 | 2457 | US-10-175-740-569 | Sequence 569, App | 162 | 30 | 2.1 | 2457 | US-10-184-640-569 | Sequence 569, App |
| 90  | 30 | 2.1 | 2457 | US-10-175-743-569 | Sequence 569, App | 163 | 30 | 2.1 | 2457 | US-10-184-650-569 | Sequence 569, App |
| 91  | 30 | 2.1 | 2457 | US-10-176-488-569 | Sequence 569, App | 164 | 30 | 2.1 | 2457 | US-10-184-651-569 | Sequence 569, App |
| 92  | 30 | 2.1 | 2457 | US-10-176-492-569 | Sequence 569, App | 165 | 30 | 2.1 | 2457 | US-10-187-588-569 | Sequence 569, App |
| 93  | 30 | 2.1 | 2457 | US-10-176-747-569 | Sequence 569, App | 166 | 30 | 2.1 | 2457 | US-10-187-597-569 | Sequence 569, App |
| 94  | 30 | 2.1 | 2457 | US-10-176-750-569 | Sequence 569, App | 167 | 30 | 2.1 | 2457 | US-10-187-598-569 | Sequence 569, App |
| 95  | 30 | 2.1 | 2457 | US-10-176-985-569 | Sequence 569, App | 168 | 30 | 2.1 | 2457 | US-10-187-600-569 | Sequence 569, App |
| 96  | 30 | 2.1 | 2457 | US-10-176-987-569 | Sequence 569, App | 169 | 30 | 2.1 | 2457 | US-10-187-601-569 | Sequence 569, App |
| 97  | 30 | 2.1 | 2457 | US-10-176-992-569 | Sequence 569, App | 170 | 30 | 2.1 | 2457 | US-10-187-602-569 | Sequence 569, App |
| 98  | 30 | 2.1 | 2457 | US-10-176-993-569 | Sequence 569, App | 171 | 30 | 2.1 | 2457 | US-10-187-603-569 | Sequence 569, App |
| 99  | 30 | 2.1 | 2457 | US-10-184-658-569 | Sequence 569, App | 172 | 30 | 2.1 | 2457 | US-10-187-741-569 | Sequence 569, App |
| 100 | 30 | 2.1 | 2457 | US-10-176-991-569 | Sequence 569, App | 173 | 30 | 2.1 | 2457 | US-10-187-743-569 | Sequence 569, App |
| 101 | 30 | 2.1 | 2457 | US-10-173-695-569 | Sequence 569, App | 174 | 30 | 2.1 | 2457 | US-10-187-746-569 | Sequence 569, App |
| 102 | 30 | 2.1 | 2457 | US-10-173-697-569 | Sequence 569, App | 175 | 30 | 2.1 | 2457 | US-10-187-747-569 | Sequence 569, App |
| 103 | 30 | 2.1 | 2457 | US-10-173-705-569 | Sequence 569, App | 176 | 30 | 2.1 | 2457 | US-10-187-751-569 | Sequence 569, App |
| 104 | 30 | 2.1 | 2457 | US-10-174-576-569 | Sequence 569, App | 177 | 30 | 2.1 | 2457 | US-10-187-753-569 | Sequence 569, App |
| 105 | 30 | 2.1 | 2457 | US-10-174-585-569 | Sequence 569, App | 178 | 30 | 2.1 | 2457 | US-10-187-754-569 | Sequence 569, App |
| 106 | 30 | 2.1 | 2457 | US-10-174-586-569 | Sequence 569, App | 179 | 30 | 2.1 | 2457 | US-10-187-757-569 | Sequence 569, App |
| 107 | 30 | 2.1 | 2457 | US-10-175-747-569 | Sequence 569, App | 180 | 30 | 2.1 | 2457 | US-10-187-884-569 | Sequence 569, App |
| 108 | 30 | 2.1 | 2457 | US-10-176-481-569 | Sequence 569, App | 181 | 30 | 2.1 | 2457 | US-10-188-767-569 | Sequence 569, App |
| 109 | 30 | 2.1 | 2457 | US-10-176-485-569 | Sequence 569, App | 182 | 30 | 2.1 | 2457 | US-10-188-769-569 | Sequence 569, App |
| 110 | 30 | 2.1 | 2457 | US-10-176-487-569 | Sequence 569, App | 183 | 30 | 2.1 | 2457 | US-10-188-770-569 | Sequence 569, App |
| 111 | 30 | 2.1 | 2457 | US-10-176-493-569 | Sequence 569, App | 184 | 30 | 2.1 | 2457 | US-10-188-773-569 | Sequence 569, App |
| 112 | 30 | 2.1 | 2457 | US-10-176-756-569 | Sequence 569, App | 185 | 30 | 2.1 | 2457 | US-10-188-781-569 | Sequence 569, App |
| 113 | 30 | 2.1 | 2457 | US-10-176-911-569 | Sequence 569, App | 186 | 30 | 2.1 | 2457 | US-10-194-361-569 | Sequence 569, App |
| 114 | 30 | 2.1 | 2457 | US-10-176-919-569 | Sequence 569, App | 187 | 30 | 2.1 | 2457 | US-10-194-423-569 | Sequence 569, App |
| 115 | 30 | 2.1 | 2457 | US-10-176-925-569 | Sequence 569, App | 188 | 30 | 2.1 | 2457 | US-10-195-897-569 | Sequence 569, App |
| 116 | 30 | 2.1 | 2457 | US-10-176-978-569 | Sequence 569, App | 189 | 30 | 2.1 | 2457 | US-10-195-901-569 | Sequence 569, App |
| 117 | 30 | 2.1 | 2457 | US-10-179-510-569 | Sequence 569, App | 190 | 30 | 2.1 | 2457 | US-10-195-902-569 | Sequence 569, App |
| 118 | 30 | 2.1 | 2457 | US-10-180-543-569 | Sequence 569, App | 191 | 30 | 2.1 | 2457 | US-10-196-743-569 | Sequence 569, App |
| 119 | 30 | 2.1 | 2457 | US-10-180-544-569 | Sequence 569, App | 192 | 30 | 2.1 | 2457 | US-10-196-760-569 | Sequence 569, App |
| 120 | 30 | 2.1 | 2457 | US-10-180-546-569 | Sequence 569, App | 193 | 30 | 2.1 | 2457 | US-10-173-708-569 | Sequence 569, App |
| 121 | 30 | 2.1 | 2457 | US-10-180-547-569 | Sequence 569, App | 194 | 30 | 2.1 | 2457 | US-10-176-479-569 | Sequence 569, App |
| 122 | 30 | 2.1 | 2457 | US-10-180-549-569 | Sequence 569, App | 195 | 30 | 2.1 | 2457 | US-10-176-748-569 | Sequence 569, App |
| 123 | 30 | 2.1 | 2457 | US-10-180-555-569 | Sequence 569, App | 196 | 30 | 2.1 | 2457 | US-10-176-916-569 | Sequence 569, App |
| 124 | 30 | 2.1 | 2457 | US-10-180-559-569 | Sequence 569, App | 197 | 30 | 2.1 | 2457 | US-10-179-507-569 | Sequence 569, App |
| 125 | 30 | 2.1 | 2457 | US-10-181-000-569 | Sequence 569, App | 198 | 30 | 2.1 | 2457 | US-10-179-516-569 | Sequence 569, App |
| 126 | 30 | 2.1 | 2457 | US-10-183-010-569 | Sequence 569, App | 199 | 30 | 2.1 | 2457 | US-10-179-519-569 | Sequence 569, App |
| 127 | 30 | 2.1 | 2457 | US-10-183-012-569 | Sequence 569, App | 200 | 30 | 2.1 | 2457 | US-10-179-525-569 | Sequence 569, App |
| 128 | 30 | 2.1 | 2457 | US-10-184-614-569 | Sequence 569, App | 201 | 30 | 2.1 | 2457 | US-10-180-540-569 | Sequence 569, App |
| 129 | 30 | 2.1 | 2457 | US-10-184-623-569 | Sequence 569, App | 202 | 30 | 2.1 | 2457 | US-10-180-545-569 | Sequence 569, App |
| 130 | 30 | 2.1 | 2457 | US-10-184-635-569 | Sequence 569, App | 203 | 30 | 2.1 | 2457 | US-10-183-006-569 | Sequence 569, App |
| 131 | 30 | 2.1 | 2457 | US-10-184-637-569 | Sequence 569, App | 204 | 30 | 2.1 | 2457 | US-10-183-008-569 | Sequence 569, App |
| 132 | 30 | 2.1 | 2457 | US-10-184-646-569 | Sequence 569, App | 205 | 30 | 2.1 | 2457 | US-10-183-017-569 | Sequence 569, App |
| 133 | 30 | 2.1 | 2457 | US-10-184-647-569 | Sequence 569, App | 206 | 30 | 2.1 | 2457 | US-10-183-019-569 | Sequence 569, App |
| 134 | 30 | 2.1 | 2457 | US-10-184-652-569 | Sequence 569, App | 207 | 30 | 2.1 | 2457 | US-10-184-618-569 | Sequence 569, App |
| 135 | 30 | 2.1 | 2457 | US-10-187-594-569 | Sequence 569, App | 208 | 30 | 2.1 | 2457 | US-10-184-625-569 | Sequence 569, App |
| 136 | 30 | 2.1 | 2457 | US-10-187-596-569 | Sequence 569, App | 209 | 30 | 2.1 | 2457 | US-10-184-626-569 | Sequence 569, App |
| 137 | 30 | 2.1 | 2457 | US-10-187-745-569 | Sequence 569, App | 210 | 30 | 2.1 | 2457 | US-10-184-627-569 | Sequence 569, App |
| 138 | 30 | 2.1 | 2457 | US-10-187-885-569 | Sequence 569, App | 211 | 30 | 2.1 | 2457 | US-10-184-645-569 | Sequence 569, App |
| 139 | 30 | 2.1 | 2457 | US-10-187-886-569 | Sequence 569, App | 212 | 30 | 2.1 | 2457 | US-10-184-654-569 | Sequence 569, App |
| 140 | 30 | 2.1 | 2457 | US-10-199-464-569 | Sequence 569, App | 213 | 30 | 2.1 | 2457 | US-10-184-655-569 | Sequence 569, App |
| 141 | 30 | 2.1 | 2457 | US-10-196-756-569 | Sequence 569, App | 214 | 30 | 2.1 | 2457 | US-10-188-774-569 | Sequence 569, App |
| 142 | 30 | 2.1 | 2457 | US-10-176-751-569 | Sequence 569, App | 215 | 30 | 2.1 | 2457 | US-10-188-775-569 | Sequence 569, App |
| 143 | 30 | 2.1 | 2457 | US-10-176-760-569 | Sequence 569, App | 216 | 30 | 2.1 | 2457 | US-10-189-462-569 | Sequence 569, App |
| 144 | 30 | 2.1 | 2457 | US-10-176-990-569 | Sequence 569, App | 217 | 30 | 2.1 | 2457 | US-10-196-745-569 | Sequence 569, App |
| 145 | 30 | 2.1 | 2457 | US-10-180-541-569 | Sequence 569, App | 218 | 30 | 2.1 | 2457 | US-10-196-762-569 | Sequence 569, App |
| 146 | 30 | 2.1 | 2457 | US-10-180-542-569 | Sequence 569, App | 219 | 30 | 2.1 | 2457 | US-10-197-695-569 | Sequence 569, App |
| 147 | 30 | 2.1 | 2457 | US-10-180-548-569 | Sequence 569, App | 220 | 30 | 2.1 | 2457 | US-10-195-894-569 | Sequence 569, App |
| 148 | 30 | 2.1 | 2457 | US-10-180-551-569 | Sequence 569, App | 221 | 30 | 2.1 | 2457 | US-10-176-484-569 | Sequence 569, App |
| 149 | 30 | 2.1 | 2457 | US-10-180-998-569 | Sequence 569, App | 222 | 30 | 2.1 | 2457 | US-10-176-793-569 | Sequence 569, App |
| 150 | 30 | 2.1 | 2457 | US-10-180-999-569 | Sequence 569, App | 223 | 30 | 2.1 | 2457 | US-10-176-917-569 | Sequence 569, App |
| 151 | 30 | 2.1 | 2457 | US-10-183-013-569 | Sequence 569, App | 224 | 30 | 2.1 | 2457 | US-10-176-982-569 | Sequence 569, App |
| 152 | 30 | 2.1 | 2457 | US-10-184-612-569 | Sequence 569, App | 225 | 30 | 2.1 | 2457 | US-10-179-506-569 | Sequence 569, App |
| 153 | 30 | 2.1 | 2457 | US-10-184-616-569 | Sequence 569, App | 226 | 30 | 2.1 | 2457 | US-10-179-513-569 | Sequence 569, App |
| 154 | 30 | 2.1 | 2457 | US-10-184-617-569 | Sequence 569, App | 227 | 30 | 2.1 | 2457 | US-10-179-514-569 | Sequence 569, App |
| 155 | 30 | 2.1 | 2457 | US-10-184-622-569 | Sequence 569, App | 228 | 30 | 2.1 | 2457 | US-10-179-522-569 | Sequence 569, App |
| 156 | 30 | 2.1 | 2457 | US-10-184-628-569 | Sequence 569, App | 229 | 30 | 2.1 | 2457 | US-10-180-556-569 | Sequence 569, App |
| 157 | 30 | 2.1 | 2457 | US-10-184-629-569 | Sequence 569, App | 230 | 30 | 2.1 | 2457 | US-10-180-560-569 | Sequence 569, App |
| 158 | 30 | 2.1 | 2457 | US-10-184-630-569 | Sequence 569, App | 231 | 30 | 2.1 | 2457 | US-10-183-015-569 | Sequence 569, App |
| 159 | 30 | 2.1 | 2457 | US-10-184-631-569 | Sequence 569, App | 232 | 30 | 2.1 | 2457 | US-10-184-615-569 | Sequence 569, App |
| 160 | 30 | 2.1 | 2457 | US-10-184-632-569 | Sequence 569, App | 233 | 30 | 2.1 | 2457 | US-10-184-620-569 | Sequence 569, App |
| 161 | 30 | 2.1 | 2457 | US-10-184-636-569 | Sequence 569, App | 234 | 30 | 2.1 | 2457 | US-10-184-643-569 | Sequence 569, App |



|     |    |     |      |    |                   |              |     |     |    |     |      |    |                   |              |     |
|-----|----|-----|------|----|-------------------|--------------|-----|-----|----|-----|------|----|-------------------|--------------|-----|
| 235 | 30 | 2.1 | 2457 | 15 | US-10-184-656-569 | Sequence 569 | App | 308 | 30 | 2.1 | 2457 | 15 | US-10-202-411-559 | Sequence 569 | App |
| 236 | 30 | 2.1 | 2457 | 15 | US-10-192-010-569 | Sequence 569 | App | 309 | 30 | 2.1 | 2457 | 15 | US-10-202-472-559 | Sequence 569 | App |
| 237 | 30 | 2.1 | 2457 | 15 | US-10-205-908-569 | Sequence 569 | App | 310 | 30 | 2.1 | 2457 | 15 | US-10-205-502-569 | Sequence 569 | App |
| 238 | 30 | 2.1 | 2457 | 15 | US-10-186-855-569 | Sequence 569 | App | 311 | 30 | 2.1 | 2457 | 15 | US-10-205-501-569 | Sequence 569 | App |
| 239 | 30 | 2.1 | 2457 | 15 | US-10-187-599-569 | Sequence 569 | App | 312 | 30 | 2.1 | 2457 | 15 | US-10-205-517-569 | Sequence 569 | App |
| 240 | 30 | 2.1 | 2457 | 15 | US-10-187-750-569 | Sequence 569 | App | 313 | 30 | 2.1 | 2457 | 15 | US-10-205-902-569 | Sequence 569 | App |
| 241 | 30 | 2.1 | 2457 | 15 | US-10-188-780-569 | Sequence 569 | App | 314 | 30 | 2.1 | 2457 | 15 | US-10-205-907-569 | Sequence 569 | App |
| 242 | 30 | 2.1 | 2457 | 15 | US-10-192-015-569 | Sequence 569 | App | 315 | 30 | 2.1 | 2457 | 15 | US-10-194-456-569 | Sequence 569 | App |
| 243 | 30 | 2.1 | 2457 | 15 | US-10-194-394-569 | Sequence 569 | App | 316 | 30 | 2.1 | 2457 | 15 | US-10-196-758-569 | Sequence 569 | App |
| 244 | 30 | 2.1 | 2457 | 15 | US-10-194-425-569 | Sequence 569 | App | 317 | 30 | 2.1 | 2457 | 15 | US-10-198-770-569 | Sequence 569 | App |
| 245 | 30 | 2.1 | 2457 | 15 | US-10-194-485-569 | Sequence 569 | App | 318 | 30 | 2.1 | 2457 | 15 | US-10-199-308-569 | Sequence 569 | App |
| 246 | 30 | 2.1 | 2457 | 15 | US-10-195-885-569 | Sequence 569 | App | 319 | 30 | 2.1 | 2457 | 15 | US-10-200-617-569 | Sequence 569 | App |
| 247 | 30 | 2.1 | 2457 | 15 | US-10-195-899-569 | Sequence 569 | App | 320 | 30 | 2.1 | 2457 | 15 | US-10-205-893-569 | Sequence 569 | App |
| 248 | 30 | 2.1 | 2457 | 15 | US-10-196-748-569 | Sequence 569 | App | 321 | 30 | 2.1 | 2457 | 15 | US-10-205-897-569 | Sequence 569 | App |
| 249 | 30 | 2.1 | 2457 | 15 | US-10-196-750-569 | Sequence 569 | App | 322 | 30 | 2.1 | 2457 | 15 | US-10-196-754-569 | Sequence 569 | App |
| 250 | 30 | 2.1 | 2457 | 15 | US-10-197-699-569 | Sequence 569 | App | 323 | 30 | 2.1 | 2457 | 15 | US-10-174-571-569 | Sequence 569 | App |
| 251 | 30 | 2.1 | 2457 | 15 | US-10-197-700-569 | Sequence 569 | App | 324 | 30 | 2.1 | 2457 | 15 | US-10-176-746-569 | Sequence 569 | App |
| 252 | 30 | 2.1 | 2457 | 15 | US-10-197-705-569 | Sequence 569 | App | 325 | 30 | 2.1 | 2457 | 15 | US-10-176-923-569 | Sequence 569 | App |
| 253 | 30 | 2.1 | 2457 | 15 | US-10-197-708-569 | Sequence 569 | App | 326 | 30 | 2.1 | 2457 | 15 | US-10-183-011-569 | Sequence 569 | App |
| 254 | 30 | 2.1 | 2457 | 15 | US-10-198-764-569 | Sequence 569 | App | 327 | 30 | 2.1 | 2457 | 15 | US-10-184-633-569 | Sequence 569 | App |
| 255 | 30 | 2.1 | 2457 | 15 | US-10-198-765-569 | Sequence 569 | App | 328 | 30 | 2.1 | 2457 | 15 | US-10-184-639-569 | Sequence 569 | App |
| 256 | 30 | 2.1 | 2457 | 15 | US-10-198-768-569 | Sequence 569 | App | 329 | 30 | 2.1 | 2457 | 15 | US-10-187-742-569 | Sequence 569 | App |
| 257 | 30 | 2.1 | 2457 | 15 | US-10-198-769-569 | Sequence 569 | App | 330 | 30 | 2.1 | 2457 | 15 | US-10-187-746-569 | Sequence 569 | App |
| 258 | 30 | 2.1 | 2457 | 15 | US-10-199-305-569 | Sequence 569 | App | 331 | 30 | 2.1 | 2457 | 15 | US-10-188-746-569 | Sequence 569 | App |
| 259 | 30 | 2.1 | 2457 | 15 | US-10-199-306-569 | Sequence 569 | App | 332 | 30 | 2.1 | 2457 | 15 | US-10-188-771-569 | Sequence 569 | App |
| 260 | 30 | 2.1 | 2457 | 15 | US-10-199-310-569 | Sequence 569 | App | 333 | 30 | 2.1 | 2457 | 15 | US-10-192-006-569 | Sequence 569 | App |
| 261 | 30 | 2.1 | 2457 | 15 | US-10-199-311-569 | Sequence 569 | App | 334 | 30 | 2.1 | 2457 | 15 | US-10-192-008-569 | Sequence 569 | App |
| 262 | 30 | 2.1 | 2457 | 15 | US-10-199-314-569 | Sequence 569 | App | 335 | 30 | 2.1 | 2457 | 15 | US-10-192-009-569 | Sequence 569 | App |
| 263 | 30 | 2.1 | 2457 | 15 | US-10-199-317-569 | Sequence 569 | App | 336 | 30 | 2.1 | 2457 | 15 | US-10-192-012-569 | Sequence 569 | App |
| 264 | 30 | 2.1 | 2457 | 15 | US-10-199-665-569 | Sequence 569 | App | 337 | 30 | 2.1 | 2457 | 15 | US-10-192-014-569 | Sequence 569 | App |
| 265 | 30 | 2.1 | 2457 | 15 | US-10-199-666-569 | Sequence 569 | App | 338 | 30 | 2.1 | 2457 | 15 | US-10-192-016-569 | Sequence 569 | App |
| 266 | 30 | 2.1 | 2457 | 15 | US-10-199-669-569 | Sequence 569 | App | 339 | 30 | 2.1 | 2457 | 15 | US-10-194-362-569 | Sequence 569 | App |
| 267 | 30 | 2.1 | 2457 | 15 | US-10-201-534-569 | Sequence 569 | App | 340 | 30 | 2.1 | 2457 | 15 | US-10-194-364-569 | Sequence 569 | App |
| 268 | 30 | 2.1 | 2457 | 15 | US-10-201-770-569 | Sequence 569 | App | 341 | 30 | 2.1 | 2457 | 15 | US-10-194-395-569 | Sequence 569 | App |
| 269 | 30 | 2.1 | 2457 | 15 | US-10-201-855-569 | Sequence 569 | App | 342 | 30 | 2.1 | 2457 | 15 | US-10-194-424-569 | Sequence 569 | App |
| 270 | 30 | 2.1 | 2457 | 15 | US-10-201-856-569 | Sequence 569 | App | 343 | 30 | 2.1 | 2457 | 15 | US-10-194-458-569 | Sequence 569 | App |
| 271 | 30 | 2.1 | 2457 | 15 | US-10-202-469-569 | Sequence 569 | App | 344 | 30 | 2.1 | 2457 | 15 | US-10-194-459-569 | Sequence 569 | App |
| 272 | 30 | 2.1 | 2457 | 15 | US-10-202-470-569 | Sequence 569 | App | 345 | 30 | 2.1 | 2457 | 15 | US-10-194-488-569 | Sequence 569 | App |
| 273 | 30 | 2.1 | 2457 | 15 | US-10-202-476-569 | Sequence 569 | App | 346 | 30 | 2.1 | 2457 | 15 | US-10-195-886-569 | Sequence 569 | App |
| 274 | 30 | 2.1 | 2457 | 15 | US-10-202-934-569 | Sequence 569 | App | 347 | 30 | 2.1 | 2457 | 15 | US-10-195-891-569 | Sequence 569 | App |
| 275 | 30 | 2.1 | 2457 | 15 | US-10-202-935-569 | Sequence 569 | App | 348 | 30 | 2.1 | 2457 | 15 | US-10-196-746-569 | Sequence 569 | App |
| 276 | 30 | 2.1 | 2457 | 15 | US-10-202-936-569 | Sequence 569 | App | 349 | 30 | 2.1 | 2457 | 15 | US-10-196-752-569 | Sequence 569 | App |
| 277 | 30 | 2.1 | 2457 | 15 | US-10-202-939-569 | Sequence 569 | App | 350 | 30 | 2.1 | 2457 | 15 | US-10-196-753-569 | Sequence 569 | App |
| 278 | 30 | 2.1 | 2457 | 15 | US-10-205-504-569 | Sequence 569 | App | 351 | 30 | 2.1 | 2457 | 15 | US-10-196-761-569 | Sequence 569 | App |
| 279 | 30 | 2.1 | 2457 | 15 | US-10-205-509-569 | Sequence 569 | App | 352 | 30 | 2.1 | 2457 | 15 | US-10-197-692-569 | Sequence 569 | App |
| 280 | 30 | 2.1 | 2457 | 15 | US-10-205-895-569 | Sequence 569 | App | 353 | 30 | 2.1 | 2457 | 15 | US-10-197-693-569 | Sequence 569 | App |
| 281 | 30 | 2.1 | 2457 | 15 | US-10-205-899-569 | Sequence 569 | App | 354 | 30 | 2.1 | 2457 | 15 | US-10-197-696-569 | Sequence 569 | App |
| 282 | 30 | 2.1 | 2457 | 15 | US-10-205-900-569 | Sequence 569 | App | 355 | 30 | 2.1 | 2457 | 15 | US-10-197-698-569 | Sequence 569 | App |
| 283 | 30 | 2.1 | 2457 | 15 | US-10-205-909-569 | Sequence 569 | App | 356 | 30 | 2.1 | 2457 | 15 | US-10-197-703-569 | Sequence 569 | App |
| 284 | 30 | 2.1 | 2457 | 15 | US-10-195-890-569 | Sequence 569 | App | 357 | 30 | 2.1 | 2457 | 15 | US-10-197-711-569 | Sequence 569 | App |
| 285 | 30 | 2.1 | 2457 | 15 | US-10-183-002-569 | Sequence 569 | App | 358 | 30 | 2.1 | 2457 | 15 | US-10-198-757-569 | Sequence 569 | App |
| 286 | 30 | 2.1 | 2457 | 15 | US-10-184-621-569 | Sequence 569 | App | 359 | 30 | 2.1 | 2457 | 15 | US-10-198-761-569 | Sequence 569 | App |
| 287 | 30 | 2.1 | 2457 | 15 | US-10-184-628-569 | Sequence 569 | App | 360 | 30 | 2.1 | 2457 | 15 | US-10-198-765-569 | Sequence 569 | App |
| 288 | 30 | 2.1 | 2457 | 15 | US-10-187-752-569 | Sequence 569 | App | 361 | 30 | 2.1 | 2457 | 15 | US-10-198-763-569 | Sequence 569 | App |
| 289 | 30 | 2.1 | 2457 | 15 | US-10-187-887-569 | Sequence 569 | App | 362 | 30 | 2.1 | 2457 | 15 | US-10-198-767-569 | Sequence 569 | App |
| 290 | 30 | 2.1 | 2457 | 15 | US-10-194-461-569 | Sequence 569 | App | 363 | 30 | 2.1 | 2457 | 15 | US-10-199-301-569 | Sequence 569 | App |
| 291 | 30 | 2.1 | 2457 | 15 | US-10-195-892-569 | Sequence 569 | App | 364 | 30 | 2.1 | 2457 | 15 | US-10-199-307-569 | Sequence 569 | App |
| 292 | 30 | 2.1 | 2457 | 15 | US-10-196-751-569 | Sequence 569 | App | 365 | 30 | 2.1 | 2457 | 15 | US-10-199-312-569 | Sequence 569 | App |
| 293 | 30 | 2.1 | 2457 | 15 | US-10-197-694-569 | Sequence 569 | App | 366 | 30 | 2.1 | 2457 | 15 | US-10-199-315-569 | Sequence 569 | App |
| 294 | 30 | 2.1 | 2457 | 15 | US-10-197-697-569 | Sequence 569 | App | 367 | 30 | 2.1 | 2457 | 15 | US-10-199-316-569 | Sequence 569 | App |
| 295 | 30 | 2.1 | 2457 | 15 | US-10-197-707-569 | Sequence 569 | App | 368 | 30 | 2.1 | 2457 | 15 | US-10-199-451-569 | Sequence 569 | App |
| 296 | 30 | 2.1 | 2457 | 15 | US-10-199-303-569 | Sequence 569 | App | 369 | 30 | 2.1 | 2457 | 15 | US-10-199-450-569 | Sequence 569 | App |
| 297 | 30 | 2.1 | 2457 | 15 | US-10-199-318-569 | Sequence 569 | App | 370 | 30 | 2.1 | 2457 | 15 | US-10-199-456-569 | Sequence 569 | App |
| 298 | 30 | 2.1 | 2457 | 15 | US-10-199-458-569 | Sequence 569 | App | 371 | 30 | 2.1 | 2457 | 15 | US-10-199-461-569 | Sequence 569 | App |
| 299 | 30 | 2.1 | 2457 | 15 | US-10-199-462-569 | Sequence 569 | App | 372 | 30 | 2.1 | 2457 | 15 | US-10-199-667-569 | Sequence 569 | App |
| 300 | 30 | 2.1 | 2457 | 15 | US-10-201-324-569 | Sequence 569 | App | 373 | 30 | 2.1 | 2457 | 15 | US-10-199-673-569 | Sequence 569 | App |
| 301 | 30 | 2.1 | 2457 | 15 | US-10-201-328-569 | Sequence 569 | App | 374 | 30 | 2.1 | 2457 | 15 | US-10-201-321-569 | Sequence 569 | App |
| 302 | 30 | 2.1 | 2457 | 15 | US-10-201-527-569 | Sequence 569 | App | 375 | 30 | 2.1 | 2457 | 15 | US-10-201-322-569 | Sequence 569 | App |
| 303 | 30 | 2.1 | 2457 | 15 | US-10-201-528-569 | Sequence 569 | App | 376 | 30 | 2.1 | 2457 | 15 | US-10-201-326-569 | Sequence 569 | App |
| 304 | 30 | 2.1 | 2457 | 15 | US-10-201-529-569 | Sequence 569 | App | 377 | 30 | 2.1 | 2457 | 15 | US-10-201-532-569 | Sequence 569 | App |
| 305 | 30 | 2.1 | 2457 | 15 | US-10-201-530-569 | Sequence 569 | App | 378 | 30 | 2.1 | 2457 | 15 | US-10-201-533-569 | Sequence 569 | App |
| 306 | 30 | 2.1 | 2457 | 15 | US-10-202-408-569 | Sequence 569 | App | 379 | 30 | 2.1 | 2457 | 15 | US-10-201-533-569 | Sequence 569 | App |
| 307 | 30 | 2.1 | 2457 | 15 | US-10-202-409-569 | Sequence 569 | App | 380 | 30 | 2.1 | 2457 | 15 | US-10-201-769-569 | Sequence 569 | App |

|     |    |     |      |    |                    |                   |     |    |     |        |    |                     |                    |
|-----|----|-----|------|----|--------------------|-------------------|-----|----|-----|--------|----|---------------------|--------------------|
| 381 | 30 | 2.1 | 2457 | 15 | US-10-201-771-569  | Sequence 569, App | 454 | 30 | 2.1 | 2457   | 15 | US-10-179-520-569   | Sequence 569, App  |
| 382 | 30 | 2.1 | 2457 | 15 | US-10-201-854-569  | Sequence 569, App | 455 | 30 | 2.1 | 2457   | 15 | US-10-201-325-569   | Sequence 569, App  |
| 383 | 30 | 2.1 | 2457 | 15 | US-10-202-410-569  | Sequence 569, App | 456 | 30 | 2.1 | 2457   | 15 | US-10-202-941-569   | Sequence 569, App  |
| 384 | 30 | 2.1 | 2457 | 15 | US-10-202-473-569  | Sequence 569, App | 457 | 30 | 2.1 | 2457   | 15 | US-10-205-910-569   | Sequence 569, App  |
| 385 | 30 | 2.1 | 2457 | 15 | US-10-202-474-569  | Sequence 569, App | 458 | 30 | 2.1 | 2457   | 15 | US-10-179-526-569   | Sequence 569, App  |
| 386 | 30 | 2.1 | 2457 | 15 | US-10-205-503-569  | Sequence 569, App | 459 | 30 | 2.1 | 2457   | 15 | US-10-179-701-569   | Sequence 569, App  |
| 387 | 30 | 2.1 | 2457 | 15 | US-10-205-512-569  | Sequence 569, App | 460 | 30 | 2.1 | 2457   | 15 | US-10-179-511-569   | Sequence 569, App  |
| 388 | 30 | 2.1 | 2457 | 15 | US-10-205-892-569  | Sequence 569, App | 461 | 30 | 2.1 | 2457   | 15 | US-10-179-518-569   | Sequence 569, App  |
| 389 | 30 | 2.1 | 2457 | 15 | US-10-205-894-569  | Sequence 569, App | 462 | 30 | 2.1 | 2457   | 15 | US-10-183-018-569   | Sequence 569, App  |
| 390 | 30 | 2.1 | 2457 | 15 | US-10-205-896-569  | Sequence 569, App | 463 | 30 | 2.1 | 2457   | 15 | US-10-184-624-569   | Sequence 569, App  |
| 391 | 30 | 2.1 | 2457 | 15 | US-10-205-898-569  | Sequence 569, App | 464 | 30 | 2.1 | 2457   | 15 | US-10-184-657-569   | Sequence 569, App  |
| 392 | 30 | 2.1 | 2457 | 15 | US-10-205-901-569  | Sequence 569, App | 465 | 30 | 2.1 | 2457   | 15 | US-10-197-701-569   | Sequence 569, App  |
| 393 | 30 | 2.1 | 2457 | 15 | US-10-205-903-569  | Sequence 569, App | 466 | 30 | 2.1 | 2457   | 15 | US-10-197-706-569   | Sequence 569, App  |
| 394 | 30 | 2.1 | 2457 | 15 | US-10-206-909-569  | Sequence 569, App | 467 | 30 | 2.1 | 2457   | 15 | US-10-201-857-569   | Sequence 569, App  |
| 395 | 30 | 2.1 | 2457 | 15 | US-10-206-910-569  | Sequence 569, App | 468 | 30 | 2.1 | 2457   | 15 | US-10-201-413-569   | Sequence 569, App  |
| 396 | 30 | 2.1 | 2457 | 15 | US-10-206-911-569  | Sequence 569, App | 469 | 30 | 2.1 | 2457   | 15 | US-10-202-938-569   | Sequence 569, App  |
| 397 | 30 | 2.1 | 2457 | 15 | US-10-206-912-569  | Sequence 569, App | 470 | 30 | 2.1 | 2457   | 15 | US-10-202-940-569   | Sequence 569, App  |
| 398 | 30 | 2.1 | 2457 | 15 | US-10-206-913-569  | Sequence 569, App | 471 | 30 | 2.1 | 2457   | 15 | US-10-205-508-569   | Sequence 569, App  |
| 399 | 30 | 2.1 | 2457 | 15 | US-10-206-914-569  | Sequence 569, App | 472 | 30 | 2.1 | 2457   | 15 | US-10-205-905-569   | Sequence 569, App  |
| 400 | 30 | 2.1 | 2457 | 15 | US-10-206-920-569  | Sequence 569, App | 473 | 30 | 2.1 | 2457   | 15 | US-10-206-918-569   | Sequence 569, App  |
| 401 | 30 | 2.1 | 2457 | 15 | US-10-206-921-569  | Sequence 569, App | 474 | 30 | 2.1 | 2457   | 15 | US-10-208-025-569   | Sequence 569, App  |
| 402 | 30 | 2.1 | 2457 | 15 | US-10-206-923-569  | Sequence 569, App | 475 | 30 | 2.1 | 2457   | 15 | US-10-198-760-569   | Sequence 569, App  |
| 403 | 30 | 2.1 | 2457 | 15 | US-10-206-925-569  | Sequence 569, App | 476 | 30 | 2.1 | 2457   | 15 | US-10-201-772-569   | Sequence 569, App  |
| 404 | 30 | 2.1 | 2457 | 15 | US-10-206-926-569  | Sequence 569, App | 477 | 30 | 2.1 | 2457   | 15 | US-10-184-613-569   | Sequence 569, App  |
| 405 | 30 | 2.1 | 2457 | 15 | US-10-206-927-569  | Sequence 569, App | 478 | 30 | 2.1 | 2457   | 15 | US-10-187-739-569   | Sequence 569, App  |
| 406 | 30 | 2.1 | 2457 | 15 | US-10-207-916-569  | Sequence 569, App | 479 | 30 | 2.1 | 2457   | 15 | US-10-206-907-569   | Sequence 569, App  |
| 407 | 30 | 2.1 | 2457 | 15 | US-10-207-916-569  | Sequence 569, App | 480 | 30 | 2.1 | 2457   | 15 | US-10-183-009-569   | Sequence 569, App  |
| 408 | 30 | 2.1 | 2457 | 15 | US-10-207-918-569  | Sequence 569, App | 481 | 30 | 2.1 | 2457   | 15 | US-10-187-755-569   | Sequence 569, App  |
| 409 | 30 | 2.1 | 2457 | 15 | US-10-207-919-569  | Sequence 569, App | 482 | 29 | 2.1 | 398    | 10 | US-09-796-632-8628  | Sequence 8628, App |
| 410 | 30 | 2.1 | 2457 | 15 | US-10-207-920-569  | Sequence 569, App | 483 | 29 | 2.1 | 398    | 15 | US-10-040-862-8628  | Sequence 8628, App |
| 411 | 30 | 2.1 | 2457 | 15 | US-10-207-925-569  | Sequence 569, App | 484 | 29 | 2.1 | 1590   | 10 | US-09-989-920-26    | Sequence 26, App1  |
| 412 | 30 | 2.1 | 2457 | 15 | US-10-208-021-569  | Sequence 569, App | 485 | 29 | 2.1 | 490    | 10 | US-09-989-919-69    | Sequence 69, App1  |
| 413 | 30 | 2.1 | 2457 | 15 | US-10-208-023-569  | Sequence 569, App | 486 | 29 | 2.1 | 6623   | 10 | US-09-989-920-16    | Sequence 16, App1  |
| 414 | 30 | 2.1 | 2457 | 15 | US-10-208-023-569  | Sequence 569, App | 487 | 28 | 2.0 | 304    | 13 | US-10-210-314-28    | Sequence 28, App1  |
| 415 | 30 | 2.1 | 2457 | 15 | US-10-208-026-569  | Sequence 569, App | 488 | 28 | 2.0 | 458    | 14 | US-10-001-835-78    | Sequence 78, App1  |
| 416 | 30 | 2.1 | 2457 | 15 | US-10-208-029-569  | Sequence 569, App | 489 | 28 | 2.0 | 642    | 9  | US-09-770-143-603   | Sequence 603, App  |
| 417 | 30 | 2.1 | 2457 | 15 | US-10-208-030-569  | Sequence 569, App | 490 | 28 | 2.0 | 788    | 13 | US-09-814-353-19890 | Sequence 19890, A  |
| 418 | 30 | 2.1 | 2457 | 15 | US-10-232-232-569  | Sequence 569, App | 491 | 28 | 2.0 | 905    | 14 | US-10-001-835-79    | Sequence 86, App1  |
| 419 | 30 | 2.1 | 2457 | 15 | US-10-195-898-569  | Sequence 569, App | 492 | 28 | 2.0 | 1485   | 10 | US-09-764-868-86    | Sequence 86, App1  |
| 420 | 30 | 2.1 | 2457 | 15 | US-10-196-759-569  | Sequence 569, App | 493 | 28 | 2.0 | 16170  | 13 | US-10-311-455-1242  | Sequence 1242, App |
| 421 | 30 | 2.1 | 2457 | 15 | US-10-173-693-569  | Sequence 569, App | 494 | 28 | 2.0 | 172637 | 9  | US-09-805-4584-3    | Sequence 3, App1   |
| 422 | 30 | 2.1 | 2457 | 15 | US-10-174-578-569  | Sequence 569, App | 495 | 27 | 1.9 | 79     | 10 | US-09-878-574-13957 | Sequence 13957, A  |
| 423 | 30 | 2.1 | 2457 | 15 | US-10-175-741-569  | Sequence 569, App | 496 | 27 | 1.9 | 207    | 10 | US-09-983-701-9011  | Sequence 9011, App |
| 424 | 30 | 2.1 | 2457 | 15 | US-10-175-750-569  | Sequence 569, App | 497 | 27 | 1.9 | 222    | 10 | US-09-983-965-956   | Sequence 956, App  |
| 425 | 30 | 2.1 | 2457 | 15 | US-10-176-986-569  | Sequence 569, App | 498 | 27 | 1.9 | 384    | 10 | US-09-983-965-3866  | Sequence 3866, App |
| 426 | 30 | 2.1 | 2457 | 15 | US-10-184-641-569  | Sequence 569, App | 499 | 27 | 1.9 | 367    | 10 | US-09-867-701-8924  | Sequence 8924, App |
| 427 | 30 | 2.1 | 2457 | 15 | US-10-187-888-569  | Sequence 569, App | 500 | 27 | 1.9 | 371    | 10 | US-09-960-352-11037 | Sequence 11037, A  |
| 428 | 30 | 2.1 | 2457 | 15 | US-10-194-360-569  | Sequence 569, App | 501 | 27 | 1.9 | 387    | 13 | US-09-814-353-10899 | Sequence 10899, A  |
| 429 | 30 | 2.1 | 2457 | 15 | US-10-194-365-569  | Sequence 569, App | 502 | 27 | 1.9 | 392    | 10 | US-09-960-352-7679  | Sequence 7679, App |
| 430 | 30 | 2.1 | 2457 | 15 | US-10-195-895-569  | Sequence 569, App | 503 | 27 | 1.9 | 392    | 10 | US-09-960-352-4559  | Sequence 4559, App |
| 431 | 30 | 2.1 | 2457 | 15 | US-10-199-302-569  | Sequence 569, App | 504 | 27 | 1.9 | 392    | 10 | US-10-040-862-4859  | Sequence 4859, App |
| 432 | 30 | 2.1 | 2457 | 15 | US-10-201-323-569  | Sequence 569, App | 505 | 27 | 1.9 | 392    | 15 | US-09-983-965-3530  | Sequence 3530, App |
| 433 | 30 | 2.1 | 2457 | 15 | US-10-205-510-569  | Sequence 569, App | 506 | 27 | 1.9 | 409    | 10 | US-09-983-965-2261  | Sequence 2261, App |
| 434 | 30 | 2.1 | 2457 | 15 | US-10-205-891-569  | Sequence 569, App | 507 | 27 | 1.9 | 412    | 10 | US-09-918-995-17619 | Sequence 17619, A  |
| 435 | 30 | 2.1 | 2457 | 15 | US-10-206-917-569  | Sequence 569, App | 508 | 27 | 1.9 | 413    | 11 | US-10-198-846-2275  | Sequence 2275, App |
| 436 | 30 | 2.1 | 2457 | 15 | US-10-207-923-569  | Sequence 569, App | 509 | 27 | 1.9 | 435    | 11 | US-09-918-995-14249 | Sequence 14249, A  |
| 437 | 30 | 2.1 | 2457 | 15 | US-10-207-924-569  | Sequence 569, App | 510 | 27 | 1.9 | 435    | 11 | US-09-525-978B-3    | Sequence 3, App1   |
| 438 | 30 | 2.1 | 2457 | 15 | US-10-208-028-569  | Sequence 569, App | 511 | 27 | 1.9 | 450    | 11 | US-09-918-995-13331 | Sequence 13331, A  |
| 439 | 30 | 2.1 | 2457 | 15 | US-10-205-904-569  | Sequence 569, App | 512 | 27 | 1.9 | 455    | 11 | US-10-001-887-79    | Sequence 79, App1  |
| 440 | 30 | 2.1 | 2457 | 15 | US-10-175-753-569  | Sequence 569, App | 513 | 27 | 1.9 | 464    | 11 | US-09-918-995-13100 | Sequence 31100, A  |
| 441 | 30 | 2.1 | 2457 | 15 | US-10-180-553-569  | Sequence 569, App | 514 | 27 | 1.9 | 471    | 10 | US-09-918-995-139   | Sequence 139, App  |
| 442 | 30 | 2.1 | 2457 | 15 | US-10-201-327-569  | Sequence 569, App | 515 | 27 | 1.9 | 483    | 11 | US-09-918-995-14445 | Sequence 14445, A  |
| 443 | 30 | 2.1 | 2457 | 15 | US-10-121-062-569  | Sequence 569, App | 516 | 27 | 1.9 | 581    | 14 | US-10-001-843-109   | Sequence 109, App  |
| 444 | 30 | 2.1 | 2457 | 15 | US-10-183-003-569  | Sequence 569, App | 517 | 27 | 1.9 | 652    | 13 | US-10-074-511-27    | Sequence 27, App1  |
| 445 | 30 | 2.1 | 2457 | 15 | US-10-183-016-569  | Sequence 569, App | 518 | 27 | 1.9 | 704    | 14 | US-10-001-887-79    | Sequence 79, App1  |
| 446 | 30 | 2.1 | 2457 | 15 | US-10-173-696-569  | Sequence 569, App | 519 | 27 | 1.9 | 727    | 13 | US-10-027-632-15522 | Sequence 15522, A  |
| 447 | 30 | 2.1 | 2457 | 15 | US-10-125-923-569  | Sequence 569, App | 520 | 27 | 1.9 | 734    | 14 | US-10-027-632-15522 | Sequence 15522, A  |
| 448 | 30 | 2.1 | 2457 | 15 | US-10-176-491-569  | Sequence 569, App | 521 | 27 | 1.9 | 734    | 13 | US-10-027-632-25300 | Sequence 25300, A  |
| 449 | 30 | 2.1 | 2457 | 15 | US-10-176-979-569  | Sequence 569, App | 522 | 27 | 1.9 | 738    | 14 | US-10-076-747-9     | Sequence 9, App1   |
| 450 | 30 | 2.1 | 2457 | 15 | US-10-187-592-569  | Sequence 569, App | 523 | 27 | 1.9 | 738    | 13 | US-10-076-747-9     | Sequence 9, App1   |
| 451 | 30 | 2.1 | 2457 | 15 | US-10-197-691-569  | Sequence 569, App | 524 | 27 | 1.9 | 1074   | 9  | US-09-925-299-24    | Sequence 24, App1  |
| 452 | 30 | 2.1 | 2457 | 15 | US-10-198-771-569  | Sequence 569, App | 525 | 27 | 1.9 | 1074   | 11 | US-09-925-299-24    | Sequence 24, App1  |
| 453 | 30 | 2.1 | 2457 | 15 | US-10-174-575A-569 | Sequence 569, App | 526 | 27 | 1.9 | 1112   | 9  | US-09-880-192-16    | Sequence 16, App1  |

|       |    |     |         |    |                      |                     |       |    |     |     |    |                      |                     |
|-------|----|-----|---------|----|----------------------|---------------------|-------|----|-----|-----|----|----------------------|---------------------|
| 527   | 27 | 1.9 | 1112    | 13 | US-10-427-348-16     | Sequence 16, Appl   | 600   | 26 | 1.9 | 333 | 11 | US-09-918-995-18334  | Sequence 18334, A   |
| C 528 | 27 | 1.9 | 1142    | 9  | US-09-733-167-4      | Sequence 4, Appl1   | C 601 | 26 | 1.9 | 337 | 10 | US-09-867-701-10110  | Sequence 10110, A   |
| C 529 | 27 | 1.9 | 1237    | 14 | US-10-027-632-122633 | Sequence 122633     | C 602 | 26 | 1.9 | 344 | 15 | US-10-198-846-12814  | Sequence 12814, A   |
| C 530 | 27 | 1.9 | 1237    | 14 | US-10-027-632-122633 | Sequence 122633     | C 603 | 26 | 1.9 | 355 | 13 | US-10-076-747-6      | Sequence 6, Appl1   |
| 531   | 27 | 1.9 | 1291    | 15 | US-10-126-560-13     | Sequence 13, Appl1  | C 604 | 26 | 1.9 | 372 | 13 | US-09-873-319-278    | Sequence 278, Appl  |
| 532   | 27 | 1.9 | 1301    | 13 | US-10-012-952A-110   | Sequence 110, Appl  | C 605 | 26 | 1.9 | 372 | 13 | US-09-960-706-458    | Sequence 458, Appl  |
| 533   | 27 | 1.9 | 1441    | 10 | US-09-989-919-60     | Sequence 60, Appl   | C 606 | 26 | 1.9 | 377 | 11 | US-09-918-995-37621  | Sequence 37621, A   |
| 534   | 27 | 1.9 | 1515    | 15 | US-10-198-846-13449  | Sequence 13449, A   | C 607 | 26 | 1.9 | 400 | 13 | US-09-814-353-16762  | Sequence 16762, A   |
| 535   | 27 | 1.9 | 1674    | 9  | US-09-802-213-1      | Sequence 1, Appl1   | C 608 | 26 | 1.9 | 401 | 10 | US-09-824-787B-83    | Sequence 83, Appl   |
| 536   | 27 | 1.9 | 1817    | 10 | US-09-954-531-173    | Sequence 173, Appl  | C 609 | 26 | 1.9 | 408 | 13 | US-09-814-353-2302   | Sequence 2302, Appl |
| 537   | 27 | 1.9 | 1817    | 10 | US-09-954-531-383    | Sequence 383, Appl  | C 610 | 26 | 1.9 | 408 | 13 | US-09-814-353-8642   | Sequence 8642, Appl |
| 538   | 27 | 1.9 | 1824    | 15 | US-10-207-655-155    | Sequence 155, Appl  | C 611 | 26 | 1.9 | 414 | 15 | US-10-198-846-3241   | Sequence 3241, Appl |
| 539   | 27 | 1.9 | 2114    | 13 | US-10-365-227-7      | Sequence 7, Appl1   | C 612 | 26 | 1.9 | 420 | 15 | US-10-074-475-127    | Sequence 127, Appl  |
| 540   | 27 | 1.9 | 2114    | 14 | US-10-105-929-7      | Sequence 7, Appl1   | C 613 | 26 | 1.9 | 423 | 15 | US-09-960-332-9228   | Sequence 9228, Appl |
| 541   | 27 | 1.9 | 2230    | 9  | US-09-822-845A-152   | Sequence 152, Appl  | C 614 | 26 | 1.9 | 423 | 15 | US-10-198-846-1545   | Sequence 1545, Appl |
| 542   | 27 | 1.9 | 2417    | 11 | US-09-822-846-474    | Sequence 474, Appl  | C 615 | 26 | 1.9 | 437 | 13 | US-09-814-353-15278  | Sequence 15278, A   |
| 543   | 27 | 1.9 | 2491    | 15 | US-10-102-806-252    | Sequence 252, Appl  | C 616 | 26 | 1.9 | 439 | 13 | US-09-814-353-15026  | Sequence 15026, A   |
| 544   | 27 | 1.9 | 2782    | 13 | US-10-115-482-1      | Sequence 1, Appl1   | C 617 | 26 | 1.9 | 446 | 13 | US-10-021-632-183737 | Sequence 183737, A  |
| C 545 | 27 | 1.9 | 2803    | 13 | US-10-027-632-112091 | Sequence 112091,    | C 618 | 26 | 1.9 | 446 | 13 | US-10-027-632-183738 | Sequence 183738, A  |
| C 546 | 27 | 1.9 | 2803    | 14 | US-10-027-632-112091 | Sequence 112091,    | C 619 | 26 | 1.9 | 446 | 13 | US-10-027-632-183739 | Sequence 183739, A  |
| 547   | 27 | 1.9 | 2898    | 13 | US-09-932-165-1479   | Sequence 1479, Appl | C 620 | 26 | 1.9 | 446 | 14 | US-10-027-632-183737 | Sequence 183737, A  |
| 548   | 27 | 1.9 | 3780    | 9  | US-09-803-126-7      | Sequence 7, Appl1   | C 621 | 26 | 1.9 | 446 | 14 | US-10-027-632-183738 | Sequence 183738, A  |
| 549   | 27 | 1.9 | 4174    | 9  | US-09-803-126-5      | Sequence 5, Appl1   | C 622 | 26 | 1.9 | 446 | 14 | US-10-027-632-183739 | Sequence 183739, A  |
| 550   | 27 | 1.9 | 5520    | 14 | US-10-001-887-43     | Sequence 43, Appl   | C 623 | 26 | 1.9 | 448 | 10 | US-09-867-701-10509  | Sequence 10509, A   |
| C 551 | 27 | 1.9 | 5893    | 13 | US-10-311-455-831    | Sequence 831, Appl  | C 624 | 26 | 1.9 | 453 | 13 | US-10-027-632-271936 | Sequence 271936, A  |
| 552   | 27 | 1.9 | 6106    | 13 | US-10-311-455-1049   | Sequence 1049, Appl | C 625 | 26 | 1.9 | 453 | 13 | US-10-027-632-271937 | Sequence 271937, A  |
| 553   | 27 | 1.9 | 6106    | 13 | US-10-340-485-75     | Sequence 75, Appl   | C 626 | 26 | 1.9 | 453 | 13 | US-10-027-632-271938 | Sequence 271938, A  |
| 554   | 27 | 1.9 | 8106    | 14 | US-10-077-130-1      | Sequence 1, Appl1   | C 627 | 26 | 1.9 | 453 | 13 | US-10-027-632-271938 | Sequence 271938, A  |
| C 555 | 27 | 1.9 | 8167    | 11 | US-09-764-891-8108   | Sequence 8108, Appl | C 628 | 26 | 1.9 | 453 | 14 | US-10-027-632-271937 | Sequence 271937, A  |
| C 556 | 27 | 1.9 | 9539    | 13 | US-10-240-453-54     | Sequence 54, Appl   | C 629 | 26 | 1.9 | 453 | 14 | US-10-027-632-271938 | Sequence 271938, A  |
| C 557 | 27 | 1.9 | 9539    | 15 | US-10-239-676-52     | Sequence 52, Appl   | C 630 | 26 | 1.9 | 457 | 11 | US-09-918-995-13644  | Sequence 13644, A   |
| C 558 | 27 | 1.9 | 14708   | 13 | US-10-311-455-2218   | Sequence 2218, Appl | C 631 | 26 | 1.9 | 459 | 11 | US-09-918-995-28827  | Sequence 28827, A   |
| C 559 | 27 | 1.9 | 14708   | 13 | US-10-240-453-324    | Sequence 324, Appl  | C 632 | 26 | 1.9 | 463 | 11 | US-09-918-995-1860   | Sequence 1860, Appl |
| C 560 | 27 | 1.9 | 14708   | 15 | US-10-239-676-222    | Sequence 222, Appl  | C 633 | 26 | 1.9 | 463 | 11 | US-09-918-995-32341  | Sequence 32341, A   |
| C 561 | 27 | 1.9 | 15500   | 9  | US-09-764-860-1091   | Sequence 1091, Appl | C 634 | 26 | 1.9 | 467 | 15 | US-10-198-846-9465   | Sequence 9465, Appl |
| C 562 | 27 | 1.9 | 15500   | 13 | US-10-212-872-1091   | Sequence 1091, Appl | C 635 | 26 | 1.9 | 473 | 10 | US-09-924-035A-592   | Sequence 592, Appl  |
| C 563 | 27 | 1.9 | 15500   | 15 | US-10-074-095-1091   | Sequence 1091, Appl | C 636 | 26 | 1.9 | 473 | 11 | US-09-918-995-6478   | Sequence 6478, Appl |
| 564   | 27 | 1.9 | 24120   | 14 | US-10-077-130-4      | Sequence 4, Appl1   | C 637 | 26 | 1.9 | 473 | 11 | US-09-918-995-11158  | Sequence 11158, A   |
| 565   | 27 | 1.9 | 38918   | 13 | US-10-017-161-2049   | Sequence 2049, Appl | C 638 | 26 | 1.9 | 482 | 11 | US-09-918-995-11341  | Sequence 11341, A   |
| C 566 | 27 | 1.9 | 3673778 | 13 | US-10-312-841-1      | Sequence 1, Appl1   | C 639 | 26 | 1.9 | 483 | 15 | US-10-198-846-2338   | Sequence 2338, Appl |
| C 567 | 27 | 1.9 | 3673778 | 13 | US-10-312-841-2      | Sequence 2, Appl1   | C 640 | 26 | 1.9 | 491 | 11 | US-09-918-995-17781  | Sequence 17781, A   |
| C 568 | 26 | 1.9 | 77      | 9  | US-09-813-358-162    | Sequence 162, Appl  | C 641 | 26 | 1.9 | 492 | 13 | US-09-814-353-17325  | Sequence 17325, A   |
| C 569 | 26 | 1.9 | 77      | 11 | US-09-997-279-162    | Sequence 162, Appl  | C 642 | 26 | 1.9 | 500 | 10 | US-09-813-351-914    | Sequence 914, Appl  |
| C 570 | 26 | 1.9 | 130     | 10 | US-09-960-352-7930   | Sequence 7930, Appl | C 643 | 26 | 1.9 | 503 | 13 | US-09-814-353-3559   | Sequence 3559, Appl |
| C 571 | 26 | 1.9 | 135     | 10 | US-09-998-598-992    | Sequence 992, Appl  | C 644 | 26 | 1.9 | 503 | 13 | US-09-814-353-8894   | Sequence 8894, Appl |
| C 572 | 26 | 1.9 | 135     | 10 | US-09-920-300A-955   | Sequence 955, Appl  | C 645 | 26 | 1.9 | 508 | 11 | US-09-918-995-6594   | Sequence 6594, Appl |
| C 573 | 26 | 1.9 | 133     | 13 | US-10-099-926-955    | Sequence 955, Appl  | C 646 | 26 | 1.9 | 511 | 14 | US-10-202-193-196    | Sequence 196, Appl  |
| C 574 | 26 | 1.9 | 133     | 14 | US-10-033-528-955    | Sequence 955, Appl  | C 647 | 26 | 1.9 | 515 | 13 | US-10-027-632-215720 | Sequence 215720, A  |
| C 575 | 26 | 1.9 | 186     | 10 | US-09-878-178-1379   | Sequence 1379, Appl | C 648 | 26 | 1.9 | 515 | 14 | US-10-027-632-215720 | Sequence 215720, A  |
| C 576 | 26 | 1.9 | 186     | 14 | US-10-046-935-1379   | Sequence 1379, Appl | C 649 | 26 | 1.9 | 536 | 11 | US-09-918-995-11816  | Sequence 11816, A   |
| C 577 | 26 | 1.9 | 186     | 15 | US-10-146-502-1379   | Sequence 1379, Appl | C 650 | 26 | 1.9 | 538 | 13 | US-09-814-353-3562   | Sequence 3562, Appl |
| C 578 | 26 | 1.9 | 200     | 9  | US-09-770-696-171    | Sequence 171, Appl  | C 651 | 26 | 1.9 | 538 | 13 | US-09-814-353-8897   | Sequence 8897, Appl |
| C 579 | 26 | 1.9 | 203     | 10 | US-09-924-035A-706   | Sequence 706, Appl  | C 652 | 26 | 1.9 | 545 | 13 | US-10-027-632-67605  | Sequence 67605, A   |
| C 580 | 26 | 1.9 | 206     | 13 | US-09-814-353-15381  | Sequence 15381, A   | C 653 | 26 | 1.9 | 545 | 13 | US-10-027-632-67606  | Sequence 67606, A   |
| C 581 | 26 | 1.9 | 208     | 9  | US-09-922-217-600    | Sequence 600, Appl  | C 654 | 26 | 1.9 | 545 | 13 | US-10-027-632-67607  | Sequence 67607, A   |
| C 582 | 26 | 1.9 | 208     | 10 | US-09-833-263-600    | Sequence 600, Appl  | C 655 | 26 | 1.9 | 545 | 13 | US-10-027-632-67608  | Sequence 67608, A   |
| C 583 | 26 | 1.9 | 208     | 10 | US-09-867-701-9150   | Sequence 9150, Appl | C 656 | 26 | 1.9 | 545 | 14 | US-10-027-632-67605  | Sequence 67605, A   |
| C 584 | 26 | 1.9 | 208     | 14 | US-10-025-380-600    | Sequence 600, Appl  | C 657 | 26 | 1.9 | 545 | 14 | US-10-027-632-67606  | Sequence 67606, A   |
| C 585 | 26 | 1.9 | 212     | 11 | US-09-918-995-14504  | Sequence 14504, A   | C 658 | 26 | 1.9 | 548 | 14 | US-10-027-632-67608  | Sequence 67608, A   |
| C 586 | 26 | 1.9 | 250     | 13 | US-10-006-285-632    | Sequence 33, Appl1  | C 659 | 26 | 1.9 | 548 | 11 | US-09-918-995-13537  | Sequence 13537, A   |
| C 587 | 26 | 1.9 | 254     | 13 | US-09-930-213-632    | Sequence 632, Appl  | C 660 | 26 | 1.9 | 551 | 13 | US-10-027-632-106544 | Sequence 106544, A  |
| C 588 | 26 | 1.9 | 255     | 9  | US-09-777-564-1159   | Sequence 1159, Appl | C 661 | 26 | 1.9 | 551 | 14 | US-10-027-632-106544 | Sequence 106544, A  |
| C 589 | 26 | 1.9 | 255     | 9  | US-09-777-564-1159   | Sequence 1159, Appl | C 662 | 26 | 1.9 | 551 | 14 | US-10-027-632-106544 | Sequence 106544, A  |
| C 590 | 26 | 1.9 | 255     | 15 | US-10-015-219-1159   | Sequence 1159, Appl | C 663 | 26 | 1.9 | 553 | 15 | US-10-198-846-10505  | Sequence 10505, A   |
| C 591 | 26 | 1.9 | 255     | 15 | US-10-015-219-1159   | Sequence 1159, Appl | C 664 | 26 | 1.9 | 594 | 9  | US-09-950-893A-10    | Sequence 893A, Appl |
| C 592 | 26 | 1.9 | 281     | 10 | US-09-867-701-9970   | Sequence 9970, Appl | C 665 | 26 | 1.9 | 595 | 9  | US-09-764-896-65     | Sequence 65, Appl1  |
| C 593 | 26 | 1.9 | 286     | 10 | US-09-924-035A-388   | Sequence 388, Appl  | C 666 | 26 | 1.9 | 604 | 15 | US-10-066-543-695    | Sequence 695, Appl  |
| C 594 | 26 | 1.9 | 296     | 13 | US-10-125-159-56     | Sequence 56, Appl   | C 667 | 26 | 1.9 | 605 | 15 | US-10-001-883-41     | Sequence 41, Appl1  |
| C 595 | 26 | 1.9 | 317     | 10 | US-09-867-701-10376  | Sequence 10376, A   | C 668 | 26 | 1.9 | 616 | 13 | US-10-027-632-189166 | Sequence 189166, A  |
| C 596 | 26 | 1.9 | 317     | 13 | US-09-814-353-4071   | Sequence 4071, Appl | C 669 | 26 | 1.9 | 616 | 13 | US-10-027-632-189167 | Sequence 189167, A  |
| C 597 | 26 | 1.9 | 317     | 13 | US-09-814-353-10378  | Sequence 10378, A   | C 670 | 26 | 1.9 | 616 | 14 | US-10-027-632-189167 | Sequence 189167, A  |
| C 598 | 26 | 1.9 | 327     | 13 | US-09-814-353-15131  | Sequence 15131, A   | C 671 | 26 | 1.9 | 617 | 13 | US-10-027-632-267545 | Sequence 267545, A  |
| C 599 | 26 | 1.9 | 332     | 15 | US-10-066-543-1538   | Sequence 1538, Appl | C 672 | 26 | 1.9 | 617 | 13 | US-10-027-632-267545 | Sequence 267545, A  |

|     |    |     |       |    |                      |                    |     |    |     |         |    |                      |                    |
|-----|----|-----|-------|----|----------------------|--------------------|-----|----|-----|---------|----|----------------------|--------------------|
| 673 | 26 | 1.9 | 617   | 14 | US-10-027-632-267545 | Sequence 267545,   | 746 | 26 | 1.9 | 20020   | 11 | US-09-764-891-8223   | Sequence 8223, Ap  |
| 674 | 26 | 1.9 | 624   | 13 | US-10-027-632-238546 | Sequence 238546,   | 747 | 26 | 1.9 | 21220   | 15 | US-10-091-483-325    | Sequence 325, App  |
| 675 | 26 | 1.9 | 624   | 13 | US-10-027-632-245496 | Sequence 245496,   | 748 | 26 | 1.9 | 21423   | 10 | US-09-764-877-2835   | Sequence 2835, Ap  |
| 676 | 26 | 1.9 | 624   | 14 | US-10-027-632-238546 | Sequence 238546,   | 749 | 26 | 1.9 | 32767   | 13 | US-10-004-113-1      | Sequence 1, Appl   |
| 677 | 26 | 1.9 | 624   | 14 | US-10-027-632-245496 | Sequence 245496,   | 750 | 26 | 1.9 | 44448   | 10 | US-09-776-874A-42    | Sequence 42, Appl  |
| 678 | 26 | 1.9 | 639   | 15 | US-10-066-543-819    | Sequence 819, App  | 751 | 26 | 1.9 | 44448   | 10 | US-09-988-113-42     | Sequence 42, Appl  |
| 679 | 26 | 1.9 | 685   | 15 | US-10-198-846-8572   | Sequence 8572, Ap  | 752 | 26 | 1.9 | 44448   | 13 | US-10-341-562-42     | Sequence 42, Appl  |
| 680 | 26 | 1.9 | 695   | 10 | US-09-867-701-9989   | Sequence 9989, Ap  | 753 | 26 | 1.9 | 44448   | 13 | US-10-384-451-42     | Sequence 42, Appl  |
| 681 | 26 | 1.9 | 738   | 13 | US-10-027-632-23191  | Sequence 23191, A  | 754 | 26 | 1.9 | 44448   | 13 | US-10-384-450-42     | Sequence 42, Appl  |
| 682 | 26 | 1.9 | 738   | 13 | US-10-027-632-23191  | Sequence 23191, A  | 755 | 26 | 1.9 | 44448   | 13 | US-10-371-218A-42    | Sequence 42, Appl  |
| 683 | 26 | 1.9 | 755   | 13 | US-10-012-697-1023   | Sequence 1023, Ap  | 756 | 26 | 1.9 | 46718   | 10 | US-09-816-093-3      | Sequence 3, Appl   |
| 684 | 26 | 1.9 | 784   | 13 | US-10-257-826A-205   | Sequence 205, App  | 757 | 26 | 1.9 | 46718   | 15 | US-10-274-873-3      | Sequence 3, Appl   |
| 685 | 26 | 1.9 | 785   | 13 | US-10-220-891-78     | Sequence 78, App   | 758 | 26 | 1.9 | 48363   | 9  | US-09-927-602-38     | Sequence 38, Appl  |
| 686 | 26 | 1.9 | 875   | 13 | US-09-814-353-21852  | Sequence 21852, A  | 759 | 26 | 1.9 | 1523315 | 13 | US-10-091-455-2148   | Sequence 2148, Ap  |
| 687 | 26 | 1.9 | 876   | 15 | US-10-198-846-8891   | Sequence 8891, Ap  | 760 | 26 | 1.9 | 1523315 | 14 | US-10-095-407-16     | Sequence 16, Appl  |
| 688 | 26 | 1.9 | 899   | 9  | US-09-816-894-11     | Sequence 11, Appl  | 761 | 26 | 1.9 | 167343  | 9  | US-09-962-436-281    | Sequence 281, App  |
| 689 | 26 | 1.9 | 927   | 14 | US-10-001-887-6      | Sequence 6, Appl   | 762 | 26 | 1.9 | 167343  | 10 | US-09-964-824A-273   | Sequence 273, App  |
| 690 | 26 | 1.9 | 944   | 9  | US-09-770-445-350    | Sequence 350, Appl | 763 | 26 | 1.9 | 173808  | 14 | US-10-003-886-10     | Sequence 10, Appl  |
| 691 | 26 | 1.9 | 981   | 9  | US-09-782-980-22     | Sequence 22, Appl  | 764 | 26 | 1.9 | 175590  | 11 | US-09-911-077A-13    | Sequence 13, Appl  |
| 692 | 26 | 1.9 | 1062  | 15 | US-10-106-698-1234   | Sequence 1234, Ap  | 765 | 26 | 1.9 | 176373  | 14 | US-10-095-407-17     | Sequence 17, Appl  |
| 693 | 26 | 1.9 | 1192  | 15 | US-10-180-375-79     | Sequence 79, Appl  | 766 | 26 | 1.9 | 180557  | 14 | US-10-003-806-6      | Sequence 6, Appl   |
| 694 | 26 | 1.9 | 1242  | 13 | US-10-193-109-3      | Sequence 3, Appl   | 767 | 26 | 1.9 | 180557  | 14 | US-10-003-806-9      | Sequence 9, Appl   |
| 695 | 26 | 1.9 | 1242  | 15 | US-10-084-994-3      | Sequence 3, Appl   | 768 | 26 | 1.9 | 3673778 | 13 | US-10-312-841-2      | Sequence 2, Appl   |
| 696 | 26 | 1.9 | 1263  | 10 | US-09-925-300-31     | Sequence 31, Appl  | 769 | 25 | 1.8 | 47      | 11 | US-09-764-891-10177  | Sequence 10177, A  |
| 697 | 26 | 1.9 | 1318  | 11 | US-09-866-050A-597   | Sequence 597, App  | 770 | 25 | 1.8 | 58      | 13 | US-09-898-860-42     | Sequence 42, Appl  |
| 698 | 26 | 1.9 | 1318  | 15 | US-10-152-661-597    | Sequence 597, App  | 771 | 25 | 1.8 | 89      | 10 | US-09-983-965-4255   | Sequence 4255, Ap  |
| 699 | 26 | 1.9 | 1327  | 9  | US-09-729-835-28     | Sequence 28, Appl  | 772 | 25 | 1.8 | 101     | 9  | US-09-770-696-896    | Sequence 896, App  |
| 700 | 26 | 1.9 | 1343  | 13 | US-10-027-632-255016 | Sequence 255016,   | 773 | 25 | 1.8 | 109     | 10 | US-09-764-887-213    | Sequence 213, App  |
| 701 | 26 | 1.9 | 1343  | 14 | US-10-027-632-255016 | Sequence 255016,   | 774 | 25 | 1.8 | 109     | 15 | US-10-092-154-213    | Sequence 213, App  |
| 702 | 26 | 1.9 | 1391  | 9  | US-09-925-301-66     | Sequence 66, Appl  | 775 | 25 | 1.8 | 135     | 10 | US-09-878-118-539    | Sequence 539, App  |
| 703 | 26 | 1.9 | 1509  | 13 | US-10-117-722-722    | Sequence 722, App  | 776 | 25 | 1.8 | 135     | 14 | US-10-046-935-559    | Sequence 559, App  |
| 704 | 26 | 1.9 | 1509  | 15 | US-10-037-270-722    | Sequence 722, App  | 777 | 25 | 1.8 | 135     | 15 | US-10-146-502-559    | Sequence 559, App  |
| 705 | 26 | 1.9 | 1542  | 14 | US-10-062-254-49     | Sequence 49, Appl  | 778 | 25 | 1.8 | 150     | 15 | US-10-066-543-2826   | Sequence 2826, Ap  |
| 706 | 26 | 1.9 | 1569  | 11 | US-09-984-271-51     | Sequence 51, Appl  | 779 | 25 | 1.8 | 151     | 9  | US-09-770-696-484    | Sequence 484, App  |
| 707 | 26 | 1.9 | 1711  | 13 | US-10-027-632-261786 | Sequence 261786,   | 780 | 25 | 1.8 | 153     | 10 | US-09-933-797-793    | Sequence 793, App  |
| 708 | 26 | 1.9 | 1711  | 14 | US-10-027-632-261786 | Sequence 261786,   | 781 | 25 | 1.8 | 158     | 10 | US-09-867-701-9298   | Sequence 9298, Ap  |
| 709 | 26 | 1.9 | 1758  | 15 | US-10-284-668-3      | Sequence 3, Appl   | 782 | 25 | 1.8 | 158     | 9  | US-09-770-696-429    | Sequence 429, App  |
| 710 | 26 | 1.9 | 1906  | 14 | US-10-027-632-97426  | Sequence 97426, A  | 783 | 25 | 1.8 | 164     | 9  | US-09-924-035A-193   | Sequence 193, App  |
| 711 | 26 | 1.9 | 1906  | 14 | US-10-027-632-97426  | Sequence 97426, A  | 784 | 25 | 1.8 | 164     | 9  | US-09-770-696-387    | Sequence 387, App  |
| 712 | 26 | 1.9 | 2123  | 11 | US-09-956-622A-26    | Sequence 26, Appl  | 785 | 25 | 1.8 | 173     | 10 | US-09-867-701-9254   | Sequence 9254, App |
| 713 | 26 | 1.9 | 2123  | 11 | US-09-956-622A-29    | Sequence 29, Appl  | 786 | 25 | 1.8 | 173     | 10 | US-09-834-975-589    | Sequence 589, App  |
| 714 | 26 | 1.9 | 2227  | 13 | US-10-269-909-31     | Sequence 31, Appl  | 787 | 25 | 1.8 | 173     | 10 | US-09-867-701-9191   | Sequence 9191, Ap  |
| 715 | 26 | 1.9 | 2269  | 15 | US-10-074-475-128    | Sequence 128, App  | 788 | 25 | 1.8 | 186     | 13 | US-09-814-353-2459   | Sequence 2459, Ap  |
| 716 | 26 | 1.9 | 2362  | 13 | US-10-320-891-48     | Sequence 48, App   | 789 | 25 | 1.8 | 186     | 13 | US-09-814-353-8796   | Sequence 8796, Ap  |
| 717 | 26 | 1.9 | 2429  | 14 | US-10-044-090-344    | Sequence 344, App  | 790 | 25 | 1.8 | 189     | 10 | US-09-834-975-390    | Sequence 390, App  |
| 718 | 26 | 1.9 | 2528  | 10 | US-09-925-300-582    | Sequence 582, App  | 791 | 25 | 1.8 | 193     | 10 | US-09-954-531-74     | Sequence 74, Appl  |
| 719 | 26 | 1.9 | 2660  | 9  | US-09-838-561-1      | Sequence 1, Appl   | 792 | 25 | 1.8 | 193     | 10 | US-09-954-531-257    | Sequence 257, App  |
| 720 | 26 | 1.9 | 2660  | 9  | US-09-816-760-1      | Sequence 1, Appl   | 793 | 25 | 1.8 | 197     | 10 | US-09-867-701-9626   | Sequence 9626, Ap  |
| 721 | 26 | 1.9 | 3149  | 13 | US-10-172-585-1      | Sequence 1, Appl   | 794 | 25 | 1.8 | 198     | 15 | US-09-867-701-9198   | Sequence 9198, Ap  |
| 722 | 26 | 1.9 | 3149  | 15 | US-10-007-926A-64    | Sequence 64, Appl  | 795 | 25 | 1.8 | 198     | 15 | US-10-113-234-3      | Sequence 3, Appl   |
| 723 | 26 | 1.9 | 3149  | 15 | US-10-225-567A-89    | Sequence 89, Appl  | 796 | 25 | 1.8 | 199     | 14 | US-10-027-632-175908 | Sequence 175908,   |
| 724 | 26 | 1.9 | 3289  | 9  | US-09-739-254-11     | Sequence 11, Appl  | 797 | 25 | 1.8 | 210     | 10 | US-09-834-975-655    | Sequence 655, App  |
| 725 | 26 | 1.9 | 3289  | 9  | US-09-904-615-11     | Sequence 11, Appl  | 798 | 25 | 1.8 | 210     | 10 | US-09-867-701-9372   | Sequence 9372, Ap  |
| 726 | 26 | 1.9 | 3289  | 13 | US-10-055-098-11     | Sequence 11, Appl  | 799 | 25 | 1.8 | 210     | 10 | US-09-983-965-711    | Sequence 711, App  |
| 727 | 26 | 1.9 | 3289  | 15 | US-10-054-988-11     | Sequence 11, Appl  | 800 | 25 | 1.8 | 211     | 13 | US-10-027-632-144767 | Sequence 144767,   |
| 728 | 26 | 1.9 | 3338  | 9  | US-09-789-919-45     | Sequence 45, Appl  | 801 | 25 | 1.8 | 211     | 14 | US-10-027-632-144767 | Sequence 144767,   |
| 729 | 26 | 1.9 | 3408  | 9  | US-09-789-919-20     | Sequence 20, Appl  | 802 | 25 | 1.8 | 221     | 10 | US-09-983-965-2142   | Sequence 2142, Ap  |
| 730 | 26 | 1.9 | 5647  | 13 | US-10-311-455-1539   | Sequence 1539, Ap  | 803 | 25 | 1.8 | 222     | 10 | US-09-834-975-352    | Sequence 352, App  |
| 731 | 26 | 1.9 | 6165  | 10 | US-09-880-107-3866   | Sequence 3866, Ap  | 804 | 25 | 1.8 | 222     | 10 | US-09-814-353-11011  | Sequence 11011, A  |
| 732 | 26 | 1.9 | 6352  | 13 | US-10-311-455-877    | Sequence 877, App  | 805 | 25 | 1.8 | 223     | 13 | US-09-930-213-584    | Sequence 584, App  |
| 733 | 26 | 1.9 | 6352  | 15 | US-10-172-086-23     | Sequence 23, Appl  | 806 | 25 | 1.8 | 223     | 13 | US-10-027-632-267228 | Sequence 267228,   |
| 734 | 26 | 1.9 | 6553  | 11 | US-09-764-872-952    | Sequence 952, App  | 807 | 25 | 1.8 | 223     | 13 | US-10-027-632-267228 | Sequence 267228,   |
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| 737 | 26 | 1.9 | 6854  | 10 | US-09-764-877-3784   | Sequence 3784, App | 810 | 25 | 1.8 | 226     | 13 | US-09-930-213-584    | Sequence 584, App  |
| 738 | 26 | 1.9 | 7921  | 13 | US-10-311-455-1943   | Sequence 1943, Ap  | 811 | 25 | 1.8 | 223     | 13 | US-10-027-632-267228 | Sequence 267228,   |
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| 741 | 26 | 1.9 | 9143  | 8  | US-08-424-550B-393   | Sequence 393, App  | 814 | 25 | 1.8 | 228     | 14 | US-10-001-843-155    | Sequence 155, Appl |
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| 743 | 26 | 1.9 | 10891 | 13 | US-10-311-455-437    | Sequence 437, App  | 816 | 25 | 1.8 | 284     | 13 | US-10-027-632-256018 | Sequence 256018,   |
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| C 819 | 25 | 1.8 | 287 | 10 | US-09-960-352-5888   | Sequence 5888, Ap  | C 892 | 25 | 1.8 | 405 | 9  | US-09-795-666-1451   | Sequence 1451, Ap    |
| C 820 | 25 | 1.8 | 290 | 10 | US-09-983-965-4172   | Sequence 4172, Ap  | C 893 | 25 | 1.8 | 405 | 9  | US-09-795-666-1451   | Sequence 1451, Ap    |
| C 821 | 25 | 1.8 | 292 | 14 | US-10-040-739-1313   | Sequence 1313, Ap  | C 894 | 25 | 1.8 | 405 | 10 | US-09-946-807-1451   | Sequence 1451, Ap    |
| C 822 | 25 | 1.8 | 296 | 10 | US-09-867-701-9532   | Sequence 9532, Ap  | C 895 | 25 | 1.8 | 405 | 11 | US-09-918-995-37246  | Sequence 37246, A    |
| C 823 | 25 | 1.8 | 297 | 10 | US-09-867-701-6769   | Sequence 6769, Ap  | C 896 | 25 | 1.8 | 408 | 15 | US-10-198-846-6012   | Sequence 6012, Ap    |
| C 824 | 25 | 1.8 | 297 | 10 | US-09-867-701-9487   | Sequence 9487, Ap  | C 897 | 25 | 1.8 | 410 | 11 | US-09-918-995-1285   | Sequence 1285, A     |
| C 825 | 25 | 1.8 | 297 | 10 | US-09-867-701-10581  | Sequence 10581, A  | C 898 | 25 | 1.8 | 410 | 15 | US-10-198-846-13374  | Sequence 13374, A    |
| C 826 | 25 | 1.8 | 306 | 13 | US-09-814-353-5239   | Sequence 5239, A   | C 899 | 25 | 1.8 | 412 | 13 | US-10-027-632-306584 | Sequence 306584      |
| C 827 | 25 | 1.8 | 306 | 13 | US-09-814-353-5239   | Sequence 5239, A   | C 900 | 25 | 1.8 | 412 | 14 | US-10-027-632-306584 | Sequence 306584, A   |
| C 828 | 25 | 1.8 | 307 | 10 | US-09-814-353-11526  | Sequence 11526, A  | C 901 | 25 | 1.8 | 413 | 11 | US-09-918-995-8203   | Sequence 8203, Ap    |
| C 829 | 25 | 1.8 | 307 | 10 | US-09-764-877-3509   | Sequence 3509, Ap  | C 902 | 25 | 1.8 | 414 | 11 | US-09-918-995-3592   | Sequence 3592, Ap    |
| C 830 | 25 | 1.8 | 310 | 10 | US-09-796-692-8537   | Sequence 8537, Ap  | C 903 | 25 | 1.8 | 415 | 10 | US-09-960-352-10021  | Sequence 10021, A    |
| C 831 | 25 | 1.8 | 310 | 15 | US-10-040-862-8537   | Sequence 8537, Ap  | C 904 | 25 | 1.8 | 416 | 11 | US-09-918-995-6498   | Sequence 6498, A     |
| C 832 | 25 | 1.8 | 316 | 11 | US-09-918-995-8182   | Sequence 8182, Ap  | C 905 | 25 | 1.8 | 416 | 13 | US-10-076-747-35     | Sequence 35, Ap      |
| C 833 | 25 | 1.8 | 322 | 15 | US-10-060-036-3330   | Sequence 3330, Ap  | C 906 | 25 | 1.8 | 418 | 9  | US-09-925-299-319    | Sequence 319, Ap     |
| C 834 | 25 | 1.8 | 325 | 15 | US-09-764-846-30     | Sequence 30, Ap    | C 907 | 25 | 1.8 | 418 | 11 | US-09-925-299-319    | Sequence 319, Ap     |
| C 835 | 25 | 1.8 | 325 | 15 | US-10-091-483-30     | Sequence 30, Ap    | C 908 | 25 | 1.8 | 419 | 11 | US-09-918-995-5669   | Sequence 5669, Ap    |
| C 836 | 25 | 1.8 | 328 | 13 | US-09-814-353-4803   | Sequence 4803, Ap  | C 909 | 25 | 1.8 | 424 | 10 | US-09-960-352-13484  | Sequence 13484, A    |
| C 837 | 25 | 1.8 | 328 | 13 | US-09-814-353-11100  | Sequence 11100, A  | C 910 | 25 | 1.8 | 424 | 10 | US-09-924-035A-800   | Sequence 800, Ap     |
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| C 839 | 25 | 1.8 | 332 | 15 | US-10-040-862-11438  | Sequence 11438, A  | C 912 | 25 | 1.8 | 430 | 13 | US-10-027-632-272428 | Sequence 272428, A   |
| C 840 | 25 | 1.8 | 332 | 15 | US-10-040-862-11438  | Sequence 11438, A  | C 913 | 25 | 1.8 | 430 | 14 | US-10-027-632-272428 | Sequence 272428, A   |
| C 841 | 25 | 1.8 | 334 | 11 | US-09-918-995-13678  | Sequence 13678, A  | C 914 | 25 | 1.8 | 435 | 13 | US-09-960-352-183    | Sequence 183, Ap     |
| C 842 | 25 | 1.8 | 334 | 11 | US-09-918-995-15303  | Sequence 15303, A  | C 915 | 25 | 1.8 | 436 | 13 | US-09-814-353-17851  | Sequence 17851, A    |
| C 843 | 25 | 1.8 | 334 | 11 | US-09-764-891-7914   | Sequence 7914, Ap  | C 916 | 25 | 1.8 | 439 | 11 | US-09-918-995-5639   | Sequence 5639, Ap    |
| C 844 | 25 | 1.8 | 335 | 15 | US-10-060-036-1587   | Sequence 1527, Ap  | C 917 | 25 | 1.8 | 441 | 13 | US-10-027-632-280424 | Sequence 280424, A   |
| C 845 | 25 | 1.8 | 337 | 10 | US-09-834-975-411    | Sequence 411, Ap   | C 918 | 25 | 1.8 | 441 | 14 | US-10-027-632-280424 | Sequence 280424, A   |
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| C 847 | 25 | 1.8 | 338 | 14 | US-10-046-935-1160   | Sequence 1160, Ap  | C 920 | 25 | 1.8 | 444 | 13 | US-10-027-632-50708  | Sequence 50708, A    |
| C 848 | 25 | 1.8 | 338 | 15 | US-10-146-502-1160   | Sequence 1160, Ap  | C 921 | 25 | 1.8 | 444 | 14 | US-10-027-632-50708  | Sequence 50708, A    |
| C 849 | 25 | 1.8 | 343 | 15 | US-10-066-543-2452   | Sequence 2452, A   | C 922 | 25 | 1.8 | 445 | 9  | US-09-770-444-807    | Sequence 807, Ap     |
| C 850 | 25 | 1.8 | 345 | 13 | US-09-814-353-18927  | Sequence 18927, A  | C 923 | 25 | 1.8 | 446 | 9  | US-09-813-358-103    | Sequence 103, Ap     |
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| C 852 | 25 | 1.8 | 351 | 10 | US-09-983-965-3574   | Sequence 3574, Ap  | C 925 | 25 | 1.8 | 446 | 13 | US-10-027-632-284332 | Sequence 284332, A   |
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| C 856 | 25 | 1.8 | 363 | 11 | US-09-918-995-18123  | Sequence 18123, A  | C 929 | 25 | 1.8 | 446 | 14 | US-10-027-632-284333 | Sequence 284333, A   |
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| C 858 | 25 | 1.8 | 370 | 9  | US-09-813-358-79     | Sequence 79, Ap    | C 931 | 25 | 1.8 | 449 | 10 | US-09-960-352-826    | Sequence 826, Ap     |
| C 859 | 25 | 1.8 | 370 | 10 | US-09-867-701-10351  | Sequence 10351, A  | C 932 | 25 | 1.8 | 452 | 11 | US-09-918-995-5374   | Sequence 5374, Ap    |
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| C 867 | 25 | 1.8 | 381 | 13 | US-10-027-632-284315 | Sequence 284315, A | C 940 | 25 | 1.8 | 458 | 15 | US-10-198-846-13935  | Sequence 13935, A    |
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| C 890 | 25 | 1.8 | 401 | 10 | US-09-946-807-1506   | Sequence 1506, Ap  | C 963 | 25 | 1.8 | 482 | 11 | US-09-918-995-7615   | Sequence 7615, Ap    |
| C 891 | 25 | 1.8 | 404 | 10 | US-09-960-352-10751  | Sequence 10751, A  | C 964 | 25 | 1.8 | 486 | 11 | US-09-918-995-7387   | Sequence 7387, Ap    |

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| 969   | 25 | 1.8 | 490 | 15 | US-10-198-846-2580   | Sequence 2580, Ap  |
| 970   | 25 | 1.8 | 491 | 13 | US-10-027-633-321064 | Sequence 321064, A |
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| 973   | 25 | 1.8 | 491 | 14 | US-10-027-633-321065 | Sequence 321065, A |
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| 978   | 25 | 1.8 | 492 | 13 | US-10-027-633-297676 | Sequence 297676, A |
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| 981   | 25 | 1.8 | 492 | 14 | US-10-027-633-56691  | Sequence 56691, A  |
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| 983   | 25 | 1.8 | 492 | 14 | US-10-027-633-297675 | Sequence 297675, A |
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| c 986 | 25 | 1.8 | 493 | 15 | US-10-198-846-1562   | Sequence 1562, Ap  |
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| 990   | 25 | 1.8 | 495 | 13 | US-09-814-353-15180  | Sequence 15180, A  |
| c 991 | 25 | 1.8 | 506 | 10 | US-09-879-533-746    | Sequence 746, App  |
| 992   | 25 | 1.8 | 510 | 10 | US-09-867-701-6763   | Sequence 6763, Ap  |
| c 993 | 25 | 1.8 | 512 | 13 | US-10-027-633-272884 | Sequence 272884, A |
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| 996   | 25 | 1.8 | 513 | 13 | US-10-027-633-174787 | Sequence 174787, A |
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ALIGNMENTS

RESULT 1  
US-09-989-919-15  
; Sequence 15, Application US/09989919  
; Patent No. US2002016434A1  
; GENERAL INFORMATION:  
; APPLICANT: Macina, Roberto  
; APPLICANT: Recipon, Herve  
; APPLICANT: Pluta, Jason  
; APPLICANT: Ghosh, Malavika  
; APPLICANT: Sun, Yongming  
; APPLICANT: Liu, Chenghua  
; FILE REFERENCE: DEX-0289  
; CURRENT APPLICATION NUMBER: US/09/989,919  
; PRIOR FILING DATE: 2001-11-21  
; PRIOR APPLICATION NUMBER: 60/252,505  
; NUMBER OF SEQ ID NOS: 124  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 15  
; LENGTH: 1397  
; TYPE: DNA  
; ORGANISM: Homo sapien  
US-09-989-919-15

Query Match 100.0%; Score 1397; DB 10; Length 1397;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 1397; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGTCCTCAGCTGTACCGGAGCGGAGTATCTGCAGAACTCCAGGCGAAGCAGCTAC 60  
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| Db | 181  | TGAGAGCATGCGGAGCTGCTCTTGTGCTGACCAACAGACCACTCGAGAGTGA 240       |
| Qy | 241  | GCCAGTGGAGAGCCCTTCCAGGAGATGCGAGACCTCTCTGAGGTTATGATG 300        |
| Db | 241  | GCCAGTGGAGAGCCCTTCCAGGAGATGCGAGACCTCTCTGAGGTTATGATG 300        |
| Qy | 301  | TGATCCCATGAGAGTCAAGAGGAGGAGTCAAGTATGAGAGAGGTATACGTC 360        |
| Db | 301  | TGATCCCATGAGAGTCAAGAGGAGGAGTCAAGTATGAGAGAGGTATACGTC 360        |
| Qy | 361  | TCAAGGAGTCAATTAAGGAGATGATGCTCTCCAGAAAGAGAAATCATCAGCC 420       |
| Db | 361  | TCAAGGAGTCAATTAAGGAGATGATGCTCTCCAGAAAGAGAAATCATCAGCC 420       |
| Qy | 421  | TTACCTCTCAGCTGCCCCCGAGGTGCGAGCTGCTCTTTTCAAGACTGATGAGCC 480     |
| Db | 421  | TTACCTCTCAGCTGCCCCCGAGGTGCGAGCTGCTCTTTTCAAGACTGATGAGCC 480     |
| Qy | 481  | AAAGTGTCCCTATCCCAAGACCAATATGTAAGGCTCTGCTGACCTATCTGAG 540       |
| Db | 481  | AAAGTGTCCCTATCCCAAGACCAATATGTAAGGCTCTGCTGACCTATCTGAG 540       |
| Qy | 541  | GGCTGGCTGAGCAGAGTCAATCTCTCAGACAGCTGGGCTTGTGCTGAGAGTGA 600      |
| Db | 541  | GGCTGGCTGAGCAGAGTCAATCTCTCAGACAGCTGGGCTTGTGCTGAGAGTGA 600      |
| Qy | 601  | GCACTGGCAGCAGTGAATGCACTGGAGAACCTTCGAGACAAAGCTAACATCCAGACA 660  |
| Db | 601  | GCACTGGCAGCAGTGAATGCACTGGAGAACCTTCGAGACAAAGCTAACATCCAGACA 660  |
| Qy | 661  | GACAGATGACCAAGACCAAGTGTAAATATGCAAAAGTTAAATGAGATTACAG 720       |
| Db | 661  | GACAGATGACCAAGACCAAGTGTAAATATGCAAAAGTTAAATGAGATTACAG 720       |
| Qy | 721  | CTAGCTTATGAGAGTCTGCTCTCTAGTCCAGAAATCATGGGGGTATGACTGCTCTCA 780  |
| Db | 721  | CTAGCTTATGAGAGTCTGCTCTCTAGTCCAGAAATCATGGGGGTATGACTGCTCTCA 780  |
| Qy | 781  | ACCTGTGAGCTGTAGCAAGCTCAGGCTAGTCTCCCACTGGGGGCTGTGCCCTCT 840     |
| Db | 781  | ACCTGTGAGCTGTAGCAAGCTCAGGCTAGTCTCCCACTGGGGGCTGTGCCCTCT 840     |
| Qy | 841  | GGAGCGTTCCTGCGGAGCCCATCATCTGTCTTAATGATGTAAGTATGCTTAAAG 900     |
| Db | 841  | GGAGCGTTCCTGCGGAGCCCATCATCTGTCTTAATGATGTAAGTATGCTTAAAG 900     |
| Qy | 901  | CCCTGCTGCTGCTGCTGCAATGCAAGGCGAGGAGGAGGAGGAGGAGGAGGAGGAG 960    |
| Db | 901  | CCCTGCTGCTGCTGCTGCAATGCAAGGCGAGGAGGAGGAGGAGGAGGAGGAGGAG 960    |
| Qy | 961  | TGCTGAGTGTCTCTCAGCTTAAAGTCTGGAAGAGACTTGGCGGGAGATGCTCAGGA 1020  |
| Db | 961  | TGCTGAGTGTCTCTCAGCTTAAAGTCTGGAAGAGACTTGGCGGGAGATGCTCAGGA 1020  |
| Qy | 1021 | TGTGGTATTTCTGTAATCTGGGAGGCTATCTTGAATCTGAGAGGAGGAGGAGGAG 1080   |
| Db | 1021 | TGTGGTATTTCTGTAATCTGGGAGGCTATCTTGAATCTGAGAGGAGGAGGAGGAG 1080   |
| Qy | 1081 | GCCAGGCCAGGGGTCAAGGGGAGAGGTGCAACCTGAGATGAGCCAAAGCTGGGGTCA 1140 |
| Db | 1081 | GCCAGGCCAGGGGTCAAGGGGAGAGGTGCAACCTGAGATGAGCCAAAGCTGGGGTCA 1140 |

QY 1141 GGAGCAGGTGTGTGTTGAGCAGGACCTTGCGGCGGGGGCTTTTGCTT 1200  
DB 1141 GGAGCAGGTGTGTGTTGAGCAGGACCTTGCGGCGGGGGCTTTTGCTT 1200  
QY 1201 CATTGCTTTCATGAAAGCTTCAAGCCAAACCAAGCTTTTCCCTTCTGAGT 1260  
DB 1201 CATTGCTTTCATGAAAGCTTCAAGCCAAACCAAGCTTTTCCCTTCTGAGT 1260  
QY 1261 TTGAATATCAGAACTTTTGTACTCTTGTGTGTTAAATGTTTAAATTTT 1320  
DB 1261 TTGAATATCAGAACTTTTGTACTCTTGTGTGTTAAATGTTTAAATTTT 1320  
QY 1321 AAAATATAATTAATTAATAAATGATGTTTCAGAGCAACTCTTCCCTAATA 1380  
DB 1321 AAAATATAATTAATTAATAAATGATGTTTCAGAGCAACTCTTCCCTAATA 1380  
QY 1381 AAAAAAAGGCGGTC 1397  
DB 1381 AAAAAAAGGCGGTC 1397

## RESULT 2

US-10-006-285-474  
Sequence 474, Application US/10006285  
Publication No. US20030165854A1  
GENERAL INFORMATION:  
APPLICANT: Mary Jane Cunningham  
APPLICANT: Matthew R. Kaser  
TITLE OF INVENTION: MARKER GENES RESPONDING TO TREATMENT WITH TOXINS  
FILE REFERENCE: PA-0039 US  
CURRENT APPLICATION NUMBER: US/10/006,285  
CURRENT FILING DATE: 2001-12-05  
NUMBER OF SEQ ID NOS: 514  
SOFTWARE: PERL Program  
SEQ ID NO 474  
LENGTH: 1714  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: misc\_feature  
OTHER INFORMATION: Incyte ID No. US20030165854A1 018653.18  
US-10-006-285-474

Query Match 62.7%; Score 876; DB 13; Length 1714;  
Best Local Similarity 99.9%; Pred. No. 0;  
Matches 926; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 442 CAGGTGGGAGCTGTCTTTTTCAGACTGATGAGGAGGAGTGTCCCTGATCCCA 501  
DB 788 CAGGTGGGAGCTGTCTTTTTCAGACTGATGAGGAGGAGTGTCCCTGATCCCA 847  
QY 502 AGACCAATATGTAAGGCTCTGCTGACCTATCTGAGGGCTCGGCTGACCACTGACT 561  
DB 848 AGACCAATATGTAAGGCTCTGCTGACCTATCTGAGGGCTCGGCTGACCACTGACT 907  
QY 562 ATCCCTAGAGCTGGGCTTGCCTGAGAGGAGTGACTTGACCTGACAGACGATGTC 621  
DB 908 ATCCCTAGAGCTGGGCTTGCCTGAGAGGAGTGACTTGACCTGACAGACGATGTC 967  
QY 622 ACTTGGAACCCCTGAGACAAAGCTAATCCAGACAGACAGATGTGACAGACAA 681  
DB 968 ACTTGGAACCCCTGAGACAAAGCTAATCCAGACAGACAGATGTGACAGACAA 1027  
QY 682 CGTGCAATATGCAATATGTTAAATGTAATGTTACAGCTTACCTGATGAGTGTG 741  
DB 1028 CGTGCAATATGCAATATGTTAAATGTAATGTTACAGCTTACCTGATGAGTGTG 1087  
QY 742 TCTTATGCAAGAAATATGAGGGGTATGAGCTCTCAACCTGAGGGCTGTAACAG 801  
DB 1088 TCTTATGCAAGAAATATGAGGGGTATGAGCTCTCTCAACCTGAGGGCTGTAACAG 1147  
QY 802 CTCAGGCTAGTCTCCCACTGGGGGCTGTGCCCCCTCTGAGAGCGTTCCGTGGGAGGC 861

DB 1148 CTCAGGCTAGTCTCCCACTGGGGGCTGTGCCCCCTCTGAGAGCGTTCCGTGGGAGGC 1207  
QY 862 CCATCACTGTGTTCAATATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAAT 921  
DB 1208 CCATCACTGTGTTCAATATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTAAT 1267  
QY 922 TCCACAGAGGCGGGTGGGGGCTGCGTGGGAGCAATTCATGCTGAGTGTCTCAGCT 981  
DB 1268 TCCACAGAGGCGGGTGGGGGCTGCGTGGGAGCAATTCATGCTGAGTGTCTCAGCT 1327  
QY 982 TAGGCTGAGACAGAGACTTGGCGGGGAGTGTCCAGAGTGTGGTGTGTTGACTG 1041  
DB 1328 TAGGCTGAGACAGAGACTTGGCGGGGAGTGTCCAGAGTGTGGTGTGTTGACTG 1387  
QY 1042 GGAGGCTATCTGTGACTTCCGAGCAGGGAGCACTCCAGGCGCAGGGGTGAGGG 1101  
DB 1388 GGAGGCTATCTGTGACTTCCGAGCAGGGAGCACTCCAGGCGCAGGGGTGAGGG 1447  
QY 1102 AGAGGTGACACCTCAGACATGAGCCAGACTGAGGAGTCAAGGAGTGTGAGGC 1161  
DB 1448 AGAGGTGACACCTCAGACATGAGCCAGACTGAGGAGTCAAGGAGTGTGAGGC 1507  
QY 1162 AGAGCTGGGGGCGGGGCTGGGGGCTTCTGCTCATTGCTTCAATGAAAGC 1221  
DB 1508 AGAGCTGGGGGCGGGGCTGGGGGCTTCTGCTCATTGCTTCAATGAAAGC 1567  
QY 1222 TCAAGGAGCCAAACAGGCTTCCCTCTGAGTGTGATTCAGAACTCTTTG 1281  
DB 1568 TCAAGGAGCCAAACAGGCTTCCCTCTGAGTGTGATTCAGAACTCTTTG 1627  
QY 1282 TACTCTGTGTTGTTAAATGTTTAAATGTTTAAATGTTTAAATGTTTAAATGTTTAA 1341  
DB 1628 TACTCTGTGTTGTTAAATGTTTAAATGTTTAAATGTTTAAATGTTTAAATGTTTAA 1687  
QY 1342 ATGATGTTTACAGCAAACTCTTCCCT 1368  
DB 1688 ATGATGTTTACAGCAAACTCTTCCCT 1714

## RESULT 3

US-09-989-919-14  
Sequence 14, Application US/09989919  
Patent No. US2002016434A1  
GENERAL INFORMATION:  
APPLICANT: Macina, Roberto  
APPLICANT: Recipon, Hervé  
APPLICANT: Pluta, Jason  
APPLICANT: Ghosh, Malavika  
APPLICANT: Sun, Yongming  
APPLICANT: Liu, Chenchua  
TITLE OF INVENTION: Compositions and Methods Relating to Colon Specific Genes and Pro  
FILE REFERENCE: DEX-0289  
CURRENT APPLICATION NUMBER: US/09/989,919  
CURRENT FILING DATE: 2001-11-21  
PRIOR APPLICATION NUMBER: 60/252,505  
PRIOR FILING DATE: 2000-11-22  
NUMBER OF SEQ ID NOS: 124  
SOFTWARE: Patentin version 3.1  
SEQ ID NO 14  
LENGTH: 470  
TYPE: DNA  
ORGANISM: Homo sapien  
US-09-989-919-14

Query Match 31.6%; Score 442; DB 10; Length 470;  
Best Local Similarity 100.0%; Pred. No. 6,58-209;  
Matches 442; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 572 GGTGGGCTTCTGCTGAGAGGAGTGAATGCACTGAGCACTGATGATGCACTTGGAGAC 631  
DB 7 GGTGGGCTTCTGCTGAGAGGAGTGAATGCACTGAGCACTGATGATGCACTTGGAGAC 66  
QY 632 CCTGACAGCAAAAGTAATCCAGACAGACAGATGTGACCAAGAGCAAAAGTGAATTA 691



```

Db      67  CCTGAGACAAAGCTACATCCAGACAGATGTGACCGACAAACGTGCAATTA 126
QY      692  TGGCAATGTAAAAAGTAGTTACCGACTTACGATAGGAGATGTGCTCTCTACTCA 751
Db      127  TGGCAATGTAAAAAGTAGTTACCGACTTACGATAGGAGATGTGCTCTCTACTCA 186
QY      752  GGAATCATGGGGGTATGATGCTCTCAACCTGTGGGTGTAAACAAAGCTAGGCTAG 811
Db      187  GGATCATGGGGGTATGATGCTCTCAACCTGTGGGTGTAAACAAAGCTAGGCTAG 246
QY      812  TCTCCCACTGGGGGTGTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 871
Db      247  TCTCCCACTGGGGGTGTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 306
QY      872  GTTCATATGTGTAAAGATGATGATTAAGCCCTGCTGCTGCTGCTGCTGCTGCTG 931
Db      307  GTTCAATATGTGTAAAGATGATGATTAAGCCCTGCTGCTGCTGCTGCTGCTGCTG 366
QY      932  GGGGTGGGGGTGCTGCTGCGGAGCAATTCATCTGAGATGTTCTCTGAGCTTAGCTG 991
Db      367  GGGGTGGGGGTGCTGCTGCGGAGCAATTCATCTGAGATGTTCTCTGAGCTTAGCTG 426
QY      992  CAGGAGACTTGGCGGGGAGATGC 1013
Db      427  CAGGAGACTTGGCGGGGAGATGC 448

```

## RESULT 4

```

US-09-880-107-1138/c
; Sequence 1138, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Vockley, Joseph G.
; APPLICANT: Scherf, Uwe
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
; FILE REFERENCE: 44921-5028-WO
; CURRENT APPLICATION NUMBER: US/09/880,107
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US 60/211,379
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: US 60/237,054
; PRIOR FILING DATE: 2000-10-02
; NUMBER OF SEQ ID NOS: 3950
; SOFTWARE: Patent Ver. 2.1
; SEQ ID NO 1138
; LENGTH: 427
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Genbank Accession No. US20020142981A1 AA451877
US-09-880-107-1138

```

Query Match 23.0%; Score 322; DB 10; Length 427;

Best Local Similarity 99.5%; Pred. No. 2.4e-149; Indels 0; Gaps 0;

Matches 422; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

QY      936  GTGGGGGCTGCTGGGAGCAATCCATGCTGAGTGTCTCTCAGCTTAGCTTGACAGG 995
Db      427  GTGGGGGCTGCTGGGAGCAATCCATGCTGAGTGTCTCTCAGCTTAGCTTGACAGG 368
QY      996  AGACTTGGCGGGGATGCTCCAGAGATGTGGTGTATTTCTTAACCTGGGAGGCTATCTG 1055
Db      367  AGACTTGGCGGGGATGCTCCAGAGATGTGGTGTATTTCTTAACCTGGGAGGCTATCTG 308
QY      1056  ACCTCCGAGAGGGGAGACTCCAGGGCAGCCAGGGGGTCAAGGGGAGAGTGACACT 1115
Db      307  ACCTCCGAGAGGGGAGACTCCAGGGCAGCCAGGGGGTCAAGGGGAGAGTGACACT 248
QY      1116  CAGCATAGGCAAGACTGGGGTCAAGAGAGAGGTGTGTTGACCGACGACTTGAGCGG 1175

```

```

Db      247  CAGCATAGGCAAGACTGGGGTCAAGAGAGAGGTGTGTTGACCGACGACTTGAGCGG 188
QY      1176  GGGTGGGGCGGGGCTTCTTCTGCTCATTTGCTTCAATGAAGCTCAAGACGCAAA 1235
Db      187  GGGTGGGACGGGGCTTCTTCTGCTCATTTGCTTCAATGAAGCTCAAGACGCAAA 128
QY      1236  ACCAGGCTTTCCTCTCTGAGTTGAAATTCAGAACTTTTGTACTTCTTGTGT 1295
Db      127  ACCAGGCTTTCCTCTCTGAGTTGAAATTCAGAACTTTTGTACTTCTTGTGT 68
QY      1296  TAAATTTTATTTTGTAAATAAATAAATTAATTAATTAATTAATTAATTAATTAAT 1355
Db      67  TAAATTTTATTTTGTAAATAAATAAATTAATTAATTAATTAATTAATTAATTAAT 8
QY      1356  CAAA 1359
Db      7  CAAA 4

```

## RESULT 5

```

US-09-918-995-32213
; Sequence 32213, Application US/09918995
; Publication No. US20030073623A1
; GENERAL INFORMATION:
; APPLICANT: HySeq, Inc.
; TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED
; FILE REFERENCE: 20411-756
; CURRENT APPLICATION NUMBER: US/09/918,995
; CURRENT FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: US/09/235,076
; PRIOR FILING DATE: 1999-01-20
; NUMBER OF SEQ ID NOS: 38054
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 32213
; LENGTH: 493
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(493)
; OTHER INFORMATION: n = A,T,C or G
US-09-918-995-32213

```

Query Match 6.9%; Score 97; DB 11; Length 493;

Best Local Similarity 100.0%; Pred. No. 1.2e-37; Indels 0; Gaps 0;

Matches 97; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY      1  GGTGCTGACCTGTATCCGAGCGGGGAGTATCTGCAGAACTCCACGGCAGACGACTAC 60
Db      397  GGTGCTGACCTGTATCCGAGCGGGGAGTATCTGCAGAACTCCACGGCAGACGACTAC 456
QY      61  CGAGTACAGTGTATCCGAGCGGATCCCTCCCGAG 97
Db      457  CGAGTACAGTGTATCCGAGCGGATCCCTCCCGAG 493

```

## RESULT 6

```

US-10-006-285-304
; Sequence 304, Application US/10006285
; Publication No. US20030165854A1
; GENERAL INFORMATION:
; APPLICANT: Mary Jane Cunningham
; APPLICANT: Matthew R. Kaser
; TITLE OF INVENTION: MARKER GENES RESPONDING TO TREATMENT WITH TOXINS
; FILE REFERENCE: PA-0039 US
; CURRENT APPLICATION NUMBER: US/10/006,285
; CURRENT FILING DATE: 2001-12-05
; NUMBER OF SEQ ID NOS: 514
; SOFTWARE: PERL Program
; SEQ ID NO 304
; LENGTH: 1358
; TYPE: DNA

```



```

; ORGANISM: Rattus norvegicus
;
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US2003016585A1 218659_Rn.1
US-10-006-285-304

```

```
Query Match      2.6%; Score 36; DB 13; Length 1358;
Best Local Similarity 100.0%; Pred. No. 2.2e-07;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0
```

Qy 203 GCCTTTGTGTCACCAACCAAGCACTGACAGT 238  
Db 461 GCGTTTGTGTCACCAACCAAGCACTGACAGT 496

RESULT 7  
US-09-770-791-70/c  
; Sequence 70, Application US/09770791  
; Patent No. US70020062014A1

```

APPLICANT: Gorlach, Jörn
APPLICANT: An, Yong-Qiang
APPLICANT: Hamilton, Carol M.
APPLICANT: Price, Jennifer L.
APPLICANT: Raines, Tracy M.
APPLICANT: Yu, Yang
APPLICANT: Rameaka, Joshua G.
APPLICANT: Page, Amy
APPLICANT: Matthew, Abraham V.
APPLICANT: Ledford, Brooke L.
APPLICANT: Woessner, Jeffrey P.
APPLICANT: Haas, William David
APPLICANT: Garcia, Carlos A.
APPLICANT: Krickler, Maja
APPLICANT: Slader, Ted
APPLICANT: Davis, Keith R.
APPLICANT: Allen, Keith
APPLICANT: Hoffman, Neil
APPLICANT: Hudban, Patrick
TITLE OF INVENTION: Expressed Sequences of Arabidopsis thaliana
FILE REFERENCE: 2029 (PARA-018PRV)
CURRENT APPLICATION NUMBER: US/09/770,791
CURRENT FILING DATE: 2001-01-26
PRIORITY APPLICATION NUMBER: 60/178,480
PRIORITY FILING DATE: 2000-01-27
NUMBER OF SEQ ID NOS: 999
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 70
LENGTH: 366
TYPE: DNA
ORGANISM: Arabidopsis thaliana
US-09-770-791-70

```

|                       |                 |                    |           |             |
|-----------------------|-----------------|--------------------|-----------|-------------|
| Query Match           | 2.1%;           | Score 30;          | DB 9;     | Length 386; |
| Best Local Similarity | 100.0%;         | Pred. No. 0.00022; |           |             |
| Matches 30;           | Conservative 0; | Mismatches 0;      | Indels 0; | Gaps 0      |

```
QY      1361 TCTTCCCTAAAAAAAAAAAAAAAAAAAAA 1390
          |||||
Db       31  TCTTCCTAAATAAAAAAAAAAAAAAAA 2
```

RESULT 8  
US-09-867-701-3641/C  
; Sequence 3641, Application US/09867701  
; Patent No. US20020132237A1  
; GENERAL INFORMATION:  
; APPLICANT: Aglate, Paul A.  
; APPLICANT: Jones, Robert  
; APPLICANT: Harlocker, Susan L.  
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY  
; TITLE OF INVENTION: AND DIAGNOSIS OF OVARIAN CANCER

```

: FILE REFERENCE: 210121.497
: CURRENT APPLICATION NUMBER: US/09/867,701
: CURRENT FILING DATE: 2001-05-29
: NUMBER OF SEQ ID NOS: 10912
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 3641
: LENGTH: 421
: TYPE: DNA
: ORGANISM: Homo sapien
:
US-09-867-701-3641

```

```
Query Match      2.1%; Score 30; DB 10; Length 421;
Best Local Similarity 100.0%; Pred. No. 0.00022;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1361 TCTTCCTTAAAAAAAAAAAAAAAAAAAAA 1390
          |||||
Db       30 TCTTCCTTAAAAAAAAAAAAAAAAAAAAA 1
```

RESULT 9  
US-09-770-445-884/C  
; Sequence 884, Application US/09770445  
; Patent No. US20020023281A1  
GENERAL INFORMATION

```

APPLICANT: Goriach, Jörn
APPLICANT: An, Yong-Qiang
APPLICANT: Hamilton, Carol M.
APPLICANT: Price, Jennifer L.
APPLICANT: Raines, Tracy M.
APPLICANT: Yu, Yang
APPLICANT: Rameaka, Joshua G.
APPLICANT: Page, Amy
APPLICANT: Matthew, Abraham V.
APPLICANT: Ledford, Brodie L.
APPLICANT: Woessner, Jeffrey P.
APPLICANT: Haas, William David
APPLICANT: Garcia, Carlos A.
APPLICANT: Krickler, Maja
APPLICANT: Slader, Ted
APPLICANT: Davis, Keith R.
APPLICANT: Allen, Keith
APPLICANT: Hoffman, Neil
APPLICANT: Hordan, Patrick
TITLE OF INVENTION: Expressed Sequences of Arabidopsis
TITLE OF INVENTION: thaliana
FILE REFERENCE: 2023US (PARA-012PRV)
CURRENT APPLICATION NUMBER: US/09/770,445
CURRENT FILING DATE: 2001-01-26
PRIOR APPLICATION NUMBER: US 60/178,472
PRIOR FILING DATE: 2000-01-27
NUMBER OF SEQ ID NOS: 999
SOFTWARE: FaSTSeq for Windows Version 4.0
SEQ ID NO 884
LENGTH: 777
TYPE: DNA
ORGANISM: Arabidopsis thaliana
US-09-770-445-884

```

|                       |         |                    |        |               |
|-----------------------|---------|--------------------|--------|---------------|
| Query Match           | 2.1%;   | Score 30;          | DB 9;  | Length 777;   |
| Best Local Similarity | 100.0%; | Pred. No. 0.00021; |        |               |
| Matches               | 30;     | Conservative       | 0;     | Mismatches 0; |
|                       |         |                    | Indels | 0;            |
|                       |         |                    | Gaps   | 0;            |

[illegible]

```

RESULT 10
US-10-199-672-569
; Sequence 569, Application US/10199672
; Publication No. US2003014842A1
; GENERAL INFORMATION:

```

```

; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C1
; CURRENT APPLICATION NUMBER: US/10/199,672
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: US/10/052,586
; PRIOR FILING DATE: 2002-01-15
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059266
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/063120
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063121
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063486
; PRIOR FILING DATE: 1997-10-21
; PRIOR APPLICATION NUMBER: 60/063540
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/063541
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/063544
; PRIOR FILING DATE: 1997-10-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 569
; LENGTH: 2457
; TYPE: DNA
; ORGANISM: Homo Sapien
; US-10-199-672-569

Query Match          2.1%; Score 30; DB 13; Length 2457;
Best Local Similarity 100.0%; Pred. No. 0.00021;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1361 TCTTCCTAAAAAAAAAAAAAAAAAAAA 1390
Db      2423 TCTTCCTAAAAAAAAAAAAAAAAAAAA 2452

RESULT 11
; US-10-187-749-569
; Sequence 569, Application US/10187749
; Publication No. US20030153036A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C1
; CURRENT APPLICATION NUMBER: US/10/187,749
```

```

; CURRENT FILING DATE: 2002-07-01
; PRIOR APPLICATION NUMBER: US/10/052,586
; PRIOR FILING DATE: 2002-01-15
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059266
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/063120
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063121
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063486
; PRIOR FILING DATE: 1997-10-21
; PRIOR APPLICATION NUMBER: 60/063540
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/063541
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/063544
; PRIOR FILING DATE: 1997-10-28
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 569
; LENGTH: 2457
; TYPE: DNA
; ORGANISM: Homo Sapien
; US-10-187-749-569

Query Match          2.1%; Score 30; DB 13; Length 2457;
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Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1361 TCTTCCTAAAAAAAAAAAAAAAAAAAA 1390
Db      2423 TCTTCCTAAAAAAAAAAAAAAAAAAAA 2452

RESULT 12
; US-10-194-457-569
; Sequence 569, Application US/10194457
; Publication No. US20030153037A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3430R1C296
; CURRENT APPLICATION NUMBER: US/10/194,457
; PRIOR FILING DATE: 2002-07-11
; PRIOR APPLICATION NUMBER: 10/052586
; PRIOR FILING DATE: 2002-01-15
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059266
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/063120
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063121
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063486
; PRIOR FILING DATE: 1997-10-21
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Job time : 385 secs

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